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INSIDE DOPE

by GEORGE F. TAUBENECK

Story of the Week
Hitting the Breadbasket
View from 'Down Under'
Are You Amused?
Shopping Is So Absorbing
The Plotter!
'A Race of Men Has Died'
Peering Into the Future

Story of the Week

It seems that a new theory recently has come to light in high-domed philosophical circles, to wit:

When the man, the monkey, and the bull emerged from evolutionary ooze, man and the monkey both were endowed by Nature with a forty-year life-span, and the bull with a mere twenty years.

In a sudden fit of generosity, the monkey forfeited two decades of his allotted life to man. Not wishing to be outdone, the bull donated ten of his allotted years to human beings.

This sum added up to the Biblical three-score-and-ten for that lucky animal, Man.

Consequently, it has come to pass that man is endowed with a life span of seventy years—the first forty of which are dedicated to normal living, the next twenty to monkey business, and the last ten to shooting the bull.

Hitting the Breadbasket

Which offers the most to the individual worker: the American system of capitalism, or the "planned economy" of Fascism and Communism?

This question was the theme of a series of group meetings conducted by Eric O. Johnson, general manager, American Central Division of the Avco Mfg. Corp. for the benefit of the plant's 2,500 workers.

Johnson explained that in a "planned economy" no consideration is given to the human being or his ability and willingness to produce, because the State assumes responsibility for the economic life of the individual.

On the other hand, he said, the American Way is a system whereby, in the long run, personal wealth comes as a reward for performing extraordinary service—with the reward becoming greater as the effort is increased.

He reminded the group that China had undertaken a "planned economy" 3,000 years ago with a result known to all. The downfall of the Roman Empire began when Republican institutions were abandoned, and a program for fixing prices and wages substituted.

Johnson also told of some 60 Communistic experiments launched in this country since 1732, few of which had lasted beyond a single generation.

However, the United States in its entirety has progressed under the American system to the point where we find its population growing from two million in 1776 to 151 million today, with the highest ratio of gainfully employed persons and the highest standards of living of any nation anywhere in the world.

More "fact sessions" of this sort ought to be conducted in plants and offices everywhere.

View from 'Down Under'

The following excerpt from a letter received recently from an Australian friend provides such a clear view of the position of friendly nations regarding the United States' function in world trade, that we recommend it as "must" reading for those of our readers who wish to have well-founded attitudes on this subject:

(Concluded on Page 9, Column 1)

'Comparative' Price Cuts on '48 Models Readied by Crosley

CINCINNATI — The 1948 Crosley electric refrigerator models, to get their first public showing March 31 in the Waldorf Astoria hotel in New York, will be priced at reductions from 7 to 16% from comparable 1947 models.

Larger capacities and additional features are being offered in the five 1948 models, according to Inwood Smith, manager of refrigeration, Crosley Division, Avco Mfg. Corp.

Best comparisons indicating the lower prices announced for the 1948 line, Smith said, shows a $50 or 16% difference between the 1948 M-88 model and a closely similar 1947 model, the SE-947.

Also, he said, a 1948 model with a suggested retail price of $259.95 is $20 under a comparable 1947 model, the SE-747, with a retail price of $279.95.

Locker Contractors Told To Aim for 'Backroom' Plants

By John O. Sweet

CHICAGO—With new locker plant construction reportedly off in many parts of the country due to high building costs and resultant financing difficulties, should contractors get back to promoting small basement and backroom plants in food stores and go easy on the fancy, $100,000 "Main Street" structures?

Reports and discussion at the recent meeting of the Frozen Food Locker Institute suggested this approach as one possible way to get the locker industry going again. Held at the Edgewater Beach hotel here March 19-20, the meeting was called to consider current locker problems, particularly financing and rental and processing charges.

After FFLI President George Foerstner reviewed the industry's predicament and stressed that "we must find ways to keep the industry going," R. R. Farquhar, executive director, told members high construction costs have boosted the cost of locker plants to a "crazy figure."

"Some contractors and prospective customers have got the idea that this is a 'Main Street' business," he

(Concluded on Back Page, Column 1)

E.E.I. Conference Will Cover Many Subjects

CHICAGO—Program for the 14th annual sales convention of the Edison Electric Institute to be staged in the Edgewater Beach hotel here from April 6 to 8 was released last week by the institute.

The convention will be divided into a two-day general program (April 7 and 8) and four sectional programs which will be held concurrently on April 6. The sectional programs will cover residential sales, industrial

(Concluded on Page 29, Column 2)

Steelmen Gambling on Short Coal Shutdown

DETROIT—The steel industry in particular and industry generally have gambled that the coal strike won't last very long.

They have gambled in that little effort has been made in preparation for the contingencies that might arise should the strike stretch out to any

(Concluded on Page 4, Column 5)

U.S. Commercial Statistics May Be Eliminated

Census Bureau Budget Is Slashed; Industry Urged To Appeal to Congressmen

WASHINGTON, D. C. — Statistics on commercial refrigeration and air conditioning equipment as collected by the Bureau of the Census are in line for elimination because of a slash in the appropriation for the Bureau, and industry leaders are urging those interested in such statistics to appeal to members of Congress who are holding hearings on the appropriations measure now.

The Bureau of the Census asked $7,120,000 but the House Appropriations Committee cut that by $3,391,000. In the subdivision for industry statistics the Bureau requested $1,494,000, but were cut to $625,000. The Senate has not completed hearings on the appropriation.

The air conditioning and commercial refrigeration statistics, appearing quarterly in a "Facts For Industry" report, have generally been regarded as the best collection of figures for such products to date. They are particularly vulnerable, however, because the report is one of the more complicated and thus one of the more expensive which the Bureau has undertaken.

Industry leaders feel that the discontinuance of this statistical reporting activity would leave a great vacuum in the type of material that is needed for sales and production planning, and suggest that those interested in seeing that the service is maintained write the following congressmen:

Senators

Sen. Ball, Minnesota
Sen. Bridges, New Hampshire
Sen. Wherry, Nebraska
Sen. Brooks, Illinois
Sen. Ferguson, Michigan
Sen. Saltonstall, Massachusetts
Sen. McCarran, Nevada
Sen. McKellar, Tennessee
Sen. Tydings, Maryland
Sen. Hayden, Arizona
Sen. Green, Rhode Island

Members of House Committee

Karl Stefan, Nebraska
Ivor D. Fenton, Pennsylvania
Walter Horan, Washington
Clifford Clevenger, Ohio
John J. Rooney, New York
J. Vaughan Gary, Virginia
Thomas J. O'Brien, Illinois

The statistics of retail trade and wholesale distribution would suffer violently, it was brought out by Rep. Gary in a speech before the House of Representatives, as the amount requested for that part of the

(Concluded on Page 29, Column 1)

Artkraft Shows New 7.3-Cu.Ft. 'Low-Boy'

LIMA, Ohio—A new table height refrigerator that offers 5 cu. ft. of moist cold refrigerated space and 2⅓ cu. ft. of frozen food locker space in two separate-opening compartments is currently being manufactured by the Artkraft Mfg. Corp. here.

Standing 36 in. high, the "Low-Boy" refrigerator offers the housewife an additional work space 42 in. wide and 24 in. deep in her kitchen, the company points out.

The moist cold compartment, according to Artkraft, is maintained at 35° F. and does not require defrosting. Because covered containers are not necessary in this compartment,

(Concluded on Page 4, Column 1)

Talk Calls Some Low-Temp Storage Space 'Inadequate'

By John O. Sweet

CHICAGO — Enlarged evaporator spaces in "all too many" mechanical domestic refrigerators now on the market do not provide the constant low storage temperature desirable for frozen foods, Elizabeth Sweeney, household equipment editor of *McCall's* magazine, told the National Frozen Food Industry Convention here.

One of more than 20 speakers to address the general convention sessions, Miss Sweeney urged the industry to direct its every effort toward making available "really adequate storage facilities."

The convention and concurrent industry exposition were held March 15-18 at the Hotel Stevens. Both were sponsored by the National Association of Frozen Food Packers.

"As an industry, you talk and write a lot about the problem of storage temperatures during the product's transportation and in distributor and dealer outlets, but you have been vague and rather indiffer-

(Concluded on Page 4, Column 3)

Some Space Remains For Coast Exhibit

SAN FRANCISCO — Refrigeration service engineers, wholesalers, contractors, and dealers will be given an opportunity to step up to refrigeration experts and development engineers and secure the answers to specific questions at the West Coast Educational Exhibit and Conference to be held at the Palace hotel in San Francisco on April 30, May 1 and 2.

The Conference is being sponsored jointly by the California Association of Refrigeration Service Engineers Society and the Refrigeration Equipment Manufacturers Association.

Exhibits by manufacturers of refrigeration equipment and supplies will consist of working models, cutaway models, sectional drawings, motion pictures, slide films, illustrations of various applications, right and wrong methods, etc.

Rema headquarters reported last week that there is still some exhibit space available at the California

(Concluded on Page 29, Column 1)

Oil-Heat Convention, Show Will Be Held In Chicago April 5-8

CHICAGO—The largest turnout in the 25-year history of the oil heat industry is expected here for the annual convention of the Oil-Heat Institute of America and the Silver Anniversary National Oil Heat Exposition.

Both events will be held here April 5 through 8, the convention headquarters being the Palmer House while the exposition is held in the Coliseum.

Final meeting of the Institute may be of broad general interest. At this merchandising session, to be held Thursday morning, April 8, the speakers will include Thomas S. Holden, president, F. W. Dodge Corp., speaking on "Housing in 1948"; Dr. Robert E. Wilson, chairman of the board, Standard Oil Co. (Indiana), "Burning Oils"; C. M. Daniels, general sales manager, Bethlehem Steel Co., "Steel Availability in 1948"; W. A. Matheson, vice president, Eureka Williams Corp., "Equipment Merchandising 1948."

(Concluded on Page 21, Column 1)

Arms Budget's Effect Awaited By Producers

'Mobilization' Rumor Is Unfounded at Present, Say Defense Authorities

DETROIT—What are the facts behind the rumors about the "industrial mobilization" for national defense and its effect upon the production of consumer durable goods?

Boiled down the facts are—very little has happened yet, but plenty can happen to change the whole current industrial picture overnight, if the international situation should warrant it.

The extent of the military services budget to implement President Truman's call for "national rearmament" will have the first direct effect. Some believe this budget might call for expenditures as high as $15 billion.

Steel and copper supplies for consumer industries may be cut. The government is understood to have its strategic stockpiles at a minimum, and if it went into the market it might upset the supply for industry.

But widely circulated reports that there might be a "50% industrial mobilization" in the United States late in April have generally been discounted by those acquainted with the national defense picture.

The time requirements for a "50% mobilization of ordnance facilities alone" would take 60 to 270 days at the earliest, it was said.

Some spokesmen for private industries have given the private opinion that another war would probably be largely a naval and aerial war in its initial stages and that most "rearming" would be done with this in mind.

February Automatic Washer Inventories Rise, NERA Reports

CHICAGO — Automatic washers were the only item of dealer inventory which showed an increase during February as compared with January, according to the second Inventory Facts survey conducted by the National Electrical Retailers Association.

Inventories of radios and all other appliances decreased, except for vacuum cleaner inventories which remained at the January average of nine per dealer.

Nera Managing Director C. C. Simpson stated that replies to the survey were received from dealers in 31 states, ranging in annual sales volume from less than $75,000 to over $500,000.

The average of four electric range sales per dealer is encouraging, Simpson stated. On the other hand,

(Concluded on Page 4, Column 4)

U.S. Report Shows Jan. Dealer Sales over '47, Wholesalers Down

WASHINGTON, D. C.—Radio and household appliance stores sold $186,000,000 worth of goods during January, 10% more than the same month last year but 37% below the sales record hung up in December, the U. S. Bureau of Census has reported.

Appliance specialty wholesalers, however, reported a 2% drop in sales

(Concluded on Page 29, Column 5)

Seltzer Directs Jahco Customer Service

CLEVELAND — John S. Seltzer, manager of purchases and stores during eight of his 24 years with the Westinghouse Electric Corp.'s Lighting Division in Cleveland, has joined Jack & Heintz Precision Industries as manager of customer service and stock control, reports Frank R. Kohnstamm, general sales manager.

John S. Seltzer

Seltzer became manager of purchases and stores for the Westinghouse Lighting Division in 1937. He left Westinghouse in 1945 to accept the position of general manager of the Coil Engineering & Mfg. Co., Roanoke, Ind. He has also served as a manufacturers' agent in Michigan.

Commercial Sales Assn. Established in Pittsburgh

PITTSBURGH — Local chapter of the National Commercial Sales Association has been formed here by more than 25 dealers, reports Robert Weston of Weston Sales & Service.

Concerned with improving conditions in the refrigeration business, the chapter will consider 1) licensing of refrigeration dealers, 2) establishing fair prices.

Group is headed by I. Rosenberg, Jr., Refrigeration Equipment Co.

Puro Sends Mailing on New Distribution Setup

NEW YORK CITY — Puro Filter Corp. of America here is sending letters and literature to a large list of refrigeration dealers and servicemen, as well as making announcements through AIR CONDITIONING & REFRIGERATION NEWS, inviting them to handle the Puro line of water coolers.

Puro also reports that it will have sales executives available to interview prospective dealers in the company's main office here.

The recent announcement that Puro Filter Corp. was seeking dealers marked a new policy. For more than 50 years the company had sold its line of coolers direct.

Pines Companies Lease Additional Factory Space

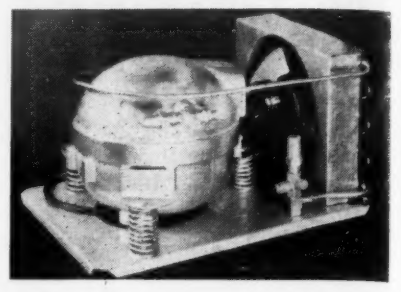
DALLAS, Tex.—Pines Engineering Co. and Pines Mfg. Co. have leased a steel building at 3200 Love Field Dr. for a 10-year period, Sidney Pines, president, has revealed.

Cost of the lease was $90,000, and the manufacturing company plans to spend $36,300 for remodeling and addition of new equipment, Pines said.

The company manufactures air conditioning equipment and other sheet metal products.

Approximately 30,000 sq. ft. of floor space is contained in the structural steel building, 3,000 sq. ft. to be air conditioned and modernized for the company's general offices, Pines added.

Lightweight Contender



One of the condensing units with an all-aluminum housing that has been introduced by Airdraulics Engineering, Inc.

* * *

New 'Airdraulics' Unit Has Aluminum Housing

NEW CANAAN, Conn.—Designed with an all-aluminum housing, a new line of hermetic type condensing units in ⅛, ⅙, and ⅕-hp. sizes has been introduced by Airdraulics Engineering, Inc. here.

Compactness, light weight, and high capacity are claimed for these units, which are available in both gravity and fan-cooled models. The ⅛-hp. model weighs 33 lbs. and measures 16 in. long, 12 in. wide, and 8¾ in. high, the manufacturer states.

The units are especially designed for use in refrigerators, freezers, bottle coolers, and water coolers.

The manufacturer also produces a line of torque tools, including torque measuring devices.

Prior Is Comptroller At Baker Ice Machine

SOUTH WINDHAM, Me.—Following the last meeting of the board of directors, the Baker Ice Machine Co., Inc. announced the appointment of A. F. Prior as comptroller.

A. F. Prior

Prior comes to the Baker organization from the Airline Foods Corp. of New York where he has served as assistant controller for some time. His previous background includes wide experience in all phases of accounting, costs, and budgets with such companies as General Foods Corp., Wright Aeronautical Corp., Federal Telephone & Radio Corp., and General Cable Corp.

Profits from Service? Dealer's Figures Put Them at .2 of 1%

CHICAGO — Do appliance dealers operate their appliance departments at a profit or a loss?

National Electrical Retailers Association believes that most dealers don't know whether they are or not, and is trying to get some figures from its membership.

One Nera member, the Collins Electric Co. of Springfield, Mass., submitted the following figures on its service department (no period of time specified) revealing that it made a profit of two-tenths of 1%:

Sales		100%
Cost of Materials	36.3%	
Cost of Productive Labor	34.6%	
Cost of Sales		70.9
Gross Profit		29.1
Occupancy Expense		
Rent	1.8%	
Light, Heat and Power	.9	2.7
Sales Costs		
Salesmen	8.3	
Mileage—Home Calls	2.1	
Other Sell. Exp.	.5	10.9
Advertising		2.2
Administrative and Office Exp.		
Salaries	2.9	
Postage	.1	
Tel. and Tel.	.3	
Bad Debts	.2	
Misc. Office	.4	3.9
Servicing Costs		
Pickup and Delivery	2.5	
Receiving and Ship.	1.2	3.7
Non-Productive Labor	2.6	
Workmens Compensation Insur.	.7	
Social Security Taxes	1.1	
Other Costs		
Depreciation	.3	
Insurance	.3	
Misc. Expense	.5	1.1
Total Expenses		28.9
Net Profit		.2

CASCADE "IT'S PEERLESS MADE"

ONE OF THE BIG THREE OF 1948

BACK VIEW

SIDE VIEW

● It's new! For the first time in commercial refrigeration, radiant cooling and convection cooling are combined and the ornamental casing of a motor driven unit is utilized as cooling surface. Fins are attached to the rear of the front panel by means of the copper tubing carrying refrigerant. Warm air from the refrigerator is drawn in at the top, cascaded over coils and discharged downwardly from the face of the unit. The entire front of the unit radiates cold to products without dehydrating blasts of air. Hugging the wall, saving many cubic feet of usable space, the Cascade Cooler is perfect for reach-in and walk-in coolers. In appearance, it's a beauty of polished aluminum, complete with built-in heat exchanger and suction spinner.

Model No.	List Price	Capacities B.T.U. per Hr. at Given T.D. Between Air and Refrigerant			Motor and Fan Characteristics				Overall Dimensions Including Motor			Connections		
		1°	10°	20°	Motor H.P.	R.P.M.	Fan Size	C.F.M. Capacity	Height	Width	Depth	Liquid	Suction	Drain
68	$70.00	65	650	1300	1/100	1500	8	190	25¾	16⅝	5	½	½	½
98	80.00	95	950	1900	1/100	1500	8	210	31	16⅝	5	½	½	½
128	90.00	125	1250	2500	1/100	1500	10	320	37½	16⅝	5	½	½	½
228	135.00	225	2250	4500	1/30	1000	12	510	41	29	8¼	½	½	½
328	156.00	325	3250	6500	1/30	1000	16	730	46½	38	8¼	½	½	½
458	198.00	450	4500	9000	1/30	1000	16	860	55½	38	8¼	½	⅝	½
608	244.00	600	6000	12000	1/30	1000	16	1050	73	38	8¼	½	⅝	½

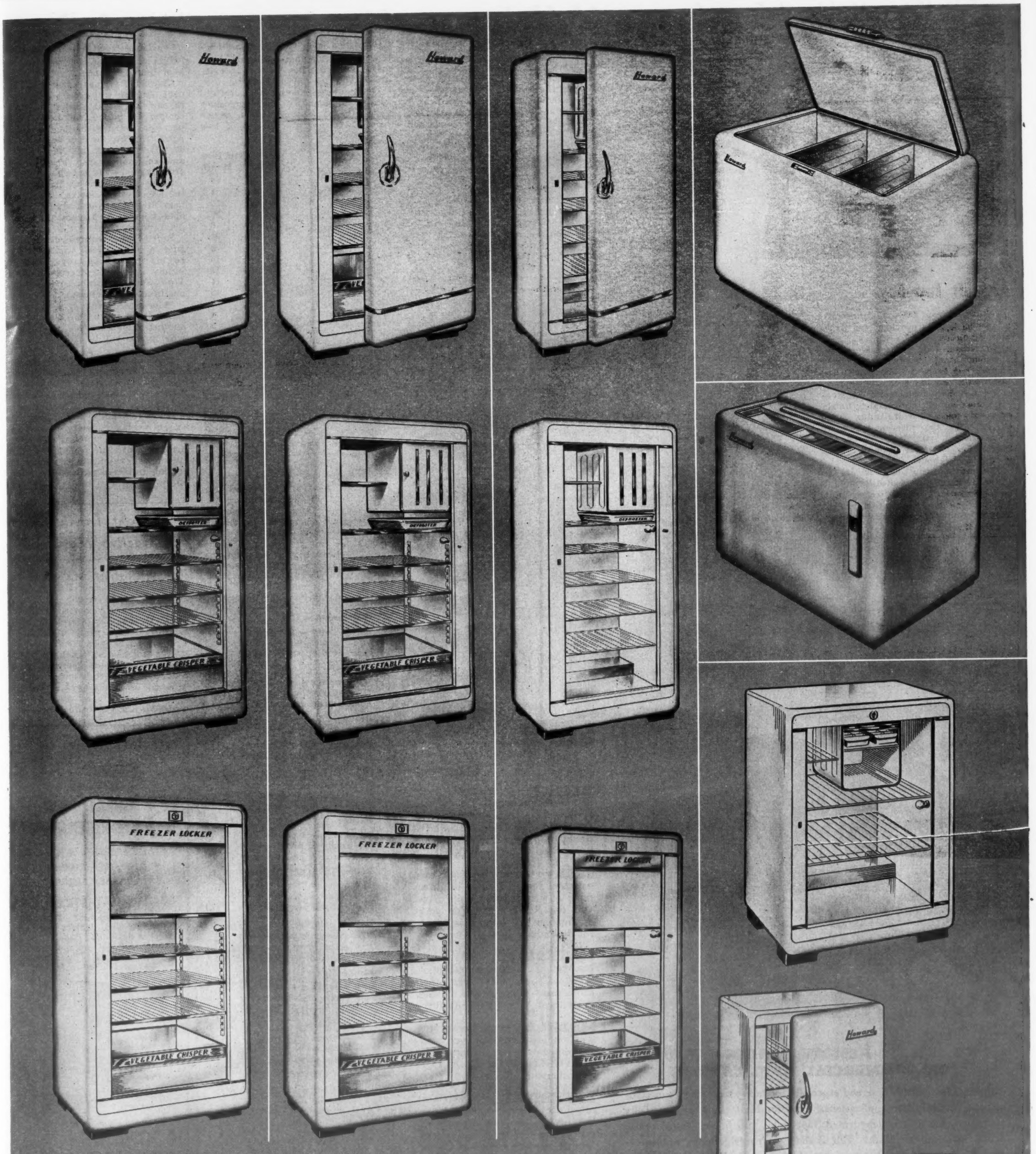
ENGINEERING DATA ABOVE

FOR BOX TEMPERATURES ABOVE 32°

FOR USE WITH FREON, METHYL CHLORIDE AND SULPHUR AS REFRIGERANT

PEERLESS of AMERICA, Inc.

2901 LAWRENCE AVE. CHICAGO 25, ILLINOIS, U. S. A.



INQUIRIES INVITED FROM
DEALERS AND DISTRIBUTORS

Howard

HOWARD REFRIGERATOR CO., HATBORO, PENNA.

Table-Height Model with Frozen Storage

In this table-height model introduced by Artkraft Mfg. Corp. the frozen food storage and ice cube compartment is on the left, with separate door.

* * *

Artkraft Low-Boy--

(Concluded from Page 1, Column 3)

a wire basket is provided for fruits and vegetables.

The frozen food and ice tray compartment contains two cold plate shelves and four ice cube trays. The latter will provide 6 lbs. of ice.

The Low-Boy cabinet is of all steel, all welded construction and is finished in two coats of white Dulux baked enamel. The two interior liners are acid resisting porcelain. Three and four inches of glass wool insulation is used throughout.

The refrigerating unit is of the ⅛-hp. hermetically sealed type and uses "Freon-12" as the refrigerant.

Retail price, f.o.b. factory, is $324.50. Shipping weight is approximately 410 lbs.

Dr. Pepper Co. Hurt by Vending Machine Lack

DALLAS, Texas—The lack of coin operated vending machines has been a great handicap to Dr. Pepper, Don C. Bryan, president of the Dr. Pepper Co. here, declared at the recent annual meeting of stockholders.

Bryan added, however, that the company, which makes the Dr. Pepper soft drink, anticipates having an entirely new machine in production shortly.

Bryan predicted that there would be more failures in the bottling business this year than ever before because of the large number of ex-servicemen who got into the field on "an ill advised G.I. program."

Talk Calls Some - -

(Concluded from Page 1, Column 4)

ent about the storage temperatures provided for frozen foods in the user's home," Miss Sweeney declared.

Until the full story on the need for correct home-storage temperatures is clearly and widely told and understood, she asserted, frozen foods will never become a really major item on family menus. Instructions on packages place no emphasis on the importance of zero storage if the food is not to be used at once, she noted.

After observing that the enlarged freezing aras of too many refrigerators do not provide adequate refrigeration for frozen foods, she advised the industry not to consider this matter outside its responsibilities. She stressed that "your industry will benefit or suffer depending upon the quality of the frozen product as it is served on the consumer's table."

"It is my conviction," Miss Sweeney said, "that we should see more cooperation between the frozen food industry and the manufacturers of domestic refrigerators and home freezers. It is of importance to you that household refrigerators possess the ability to store more than a 24-hour supply of frozen foods."

Commenting on home freezers, the speaker suggested the industry should realize these units are much more of an asset than a source of competition. She said a recent spot survey of her magazine's readership showed that in the homes checked having a home freezer, commercially frozen food found its place in 73% of them.

In addition to proper storage facilities, the provision of adequate "use" instructions was singled out as one of the industry's major tasks.

February Inventory--

(Concluded from Page 1, Column 5)

it is his opinion that radio and automatic washer sales figures indicate a need for special promotions.

Outstanding example of carefully controlled inventory and high sales volume was recorded by a dealer from Owosso, Mich., a city of less than 20,000 population.

Item	On Hand	Sold Last Month
Dishwashers	1	2
Disposals	2	4
Driers	5	10
Home Freezers	3	30
Ironers	2	6
Radios	15	32
Ranges, electric	2	8
Ranges, gas	7	15
Refrigerators	3	12
Vacuum cleaners	5	14
Washers, conventional	6	16
Washers, automatic	5	8
Water heaters, electric	7	4
Water heaters, gas	3	2

Beginning with the March inventory facts to be released April 15, Nera will compare total number sold on each item, as well as individual listings of small appliances.

Some dealers reported February a slow month. One dealer commented that his city is in the shoe manufacturing area, and factories have recently been working only part time. Many dealers, however, reported a better volume in February, 1948, than they had in February, 1947.

A dealer in Tennessee voiced the opinion that he was receiving too many deluxe models of major appliances and not enough standard models. Still another dealer commented that household refrigeration units were in short supply although he had an abundance of slow-moving commercial units.

INVENTORY FACTS AS OF FEB. 29

1. **Dishwashers**
   48% average 2 per dealer
   52% reported no inventory
   Average sold per dealer: 2
2. **Disposals**
   53% average 4 per dealer
   47% reported no inventory
   Average sold per dealer: 2
3. **Driers**
   51% average 2 per dealer
   49% reported no inventory
   Average sold per dealer: 2
4. **Home Freezers**
   83% average 3 per dealer
   17% reported no inventory
   Average sold per dealer: 3
5. **Ironers**
   86% average 4 per dealer
   14% reported no inventory
   Average sold per dealer: 2
6. **Radios (AM, FM, Tel.)**
   85% average 33 per dealer
   15% reported no inventory
   Average sold per dealer: 10
7. **Ranges (electric)**
   88% average 6 per dealer
   12% reported no inventory
   Average sold per dealer: 4
8. **Ranges (gas)**
   65% average 6 per dealer
   35% reported no inventory
   Average sold per dealer: 3
9. **Refrigerators**
   91% average 7 per dealer
   9% reported no inventory
   Average sold per dealer: 7
10. **Vacuum Cleaners**
    98% average 9 per dealer
    2% reported no inventory
    Average sold per dealer: 3
11. **Washers (conventional)**
    91% average 7 per dealer
    9% reported no inventory
    Average sold per dealer: 5
12. **Washers (automatic)**
    75% average 11 per dealer
    25% reported no inventory
    Average sold per dealer: 3
13. **Water Heaters (electric)**
    84% average 5 per dealer
    16% reported no inventory
    Average sold per dealer: 2
14. **Water Heaters (gas)**
    35% average 5 per dealer
    65% reported no inventory
    Average sold per dealer: 2
15. **Small Appliances**
    58% average 173 per dealer
    42% reported no inventory
    Average sold per dealer: 63
16. **Other Large Appliances**
    19% average 9 per dealer
    81% reported no inventory
    Average sold per dealer: 3

Steelmen Gambling--

(Concluded from Page 1, Column 2)

length of time; steel mills have been kept going full blast.

The belief is apparently that President Truman will seek a court order to end the strike during an 80-day cooling off period, following the report of his fact-finding board on April 5. This he can do under the Taft-Hartley Act, but John L. Lewis and the miners can also defy the order, as they did once before.

Some mills were beginning to feel the effect of the strike. The Bethlehem Steel Co. was forced to curtail operations at its Lackawanna, N. Y., plant nearly 30%.

Refrigeration equipment and appliance manufacturers would probably be hit quickly by any diminishing supply of steel. According to the *Wall Street Journal,* one appliance manufacturer declared:

"The steel situation is a national scandal; it's getting no better," while another added, "The Lord knows what prices will be if the coal strike continues."

One big company, said the *Wall Street Journal,* is resorting to the following method:

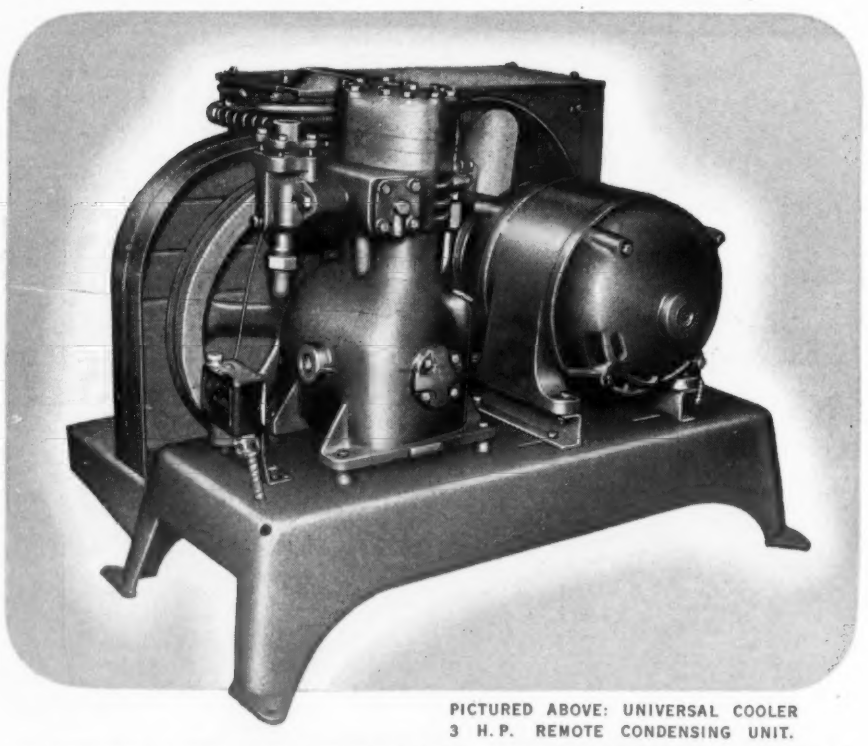
It buys unfinished steel wherever it can be located. Then it scouts around for mills which have any excess rolling capacity to press out the sheets. One unusual part of this arrangement: The rolling mills often turn down payment in money, preferring to retain part of the finished sheets instead.

Freight Traffic Cut Effective March 30

WASHINGTON, D. C.—The Office of Defense Transportation has ordered a 25% cut in freight traffic hauled by coal-burning locomotives, effective midnight, Tuesday, March 30, to conserve coal stockpiles.

The order is not a freight embargo, it was emphasized. A list of essential items will accompany the freight reduction order, it is understood, and after the railroads have moved these essentials, they are free to carry whatever kinds of traffic they choose.

IT'S DEPENDABLE !



PICTURED ABOVE: UNIVERSAL COOLER 3 H.P. REMOTE CONDENSING UNIT.

1/4 TO 15 H. P. REMOTE CONDENSING UNITS FOR COMMERCIAL APPLICATIONS

The unit illustrated is designed especially for heavy duty service in commercial refrigeration applications. Precision-built parts are carefully assembled, the unit is dehydrated, thoroughly run in and tested under actual operating conditions. Tell us about your refrigeration problems—let our sales engineers show you how Universal Cooler can solve them.

BECAUSE . . .

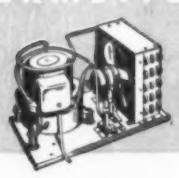
DESIGN — Progressive, alert design engineering for which Universal Cooler is known around the world, pays dividends in efficiency and dependability. Universal Cooler design is RIGHT.

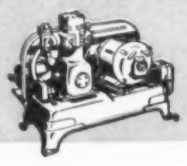
SIZE — Universal Cooler's unmatched range of sizes in three types of refrigerating units gives you the RIGHT size for your application—an important factor for dependable service.

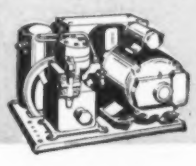
MATERIALS — Bronze bearings . . . electric annealing of crankshafts — these and other provisions for long life of moving parts mean added dependability.

METHODS — Elaborate inspection devices used at every step in production assure a dependable UNIFORMITY OF QUALITY not otherwise obtainable.

EXPERIENCE — There's no substitute for the cumulative benefits of 25 years' experience reflected in the design and manufacture of every Universal Cooler unit.

HERMETICS 

REMOTES 

SELF-CONTAINED 

UNIVERSAL COOLER

1922—1947 . . . 25 YEARS OF PROGRESS

DIVISION INTERNATIONAL DETROLA CORPORATION

MARION, OHIO • BRANTFORD, ONTARIO

FOR LIVE WIRES ONLY!

BUXTON OFFERS 3 GREAT NEW REFRIGERATORS

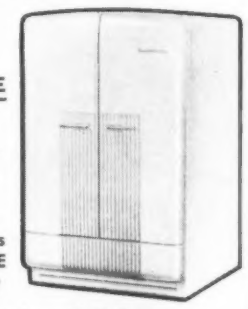
- *NEW ENGINEERING FEATURES*
- *NEW STREAMLINING*
- *COMPACT DESIGN*

WE WANT DISTRIBUTORS

We will franchise alert distributors and dealers for this market-designed line . . . a really unusual opportunity to deliver top-quality merchandise to an established market.

TOP SALES FEATURE

Space Requirement of Average 12 cu. ft. Refrigerator —Yet Provides Almost TWICE the Capacity



Combination—Half Zero Half Normal—19 cu. ft.
All Zero—18 cu. ft.

WRITE OR PHONE TODAY

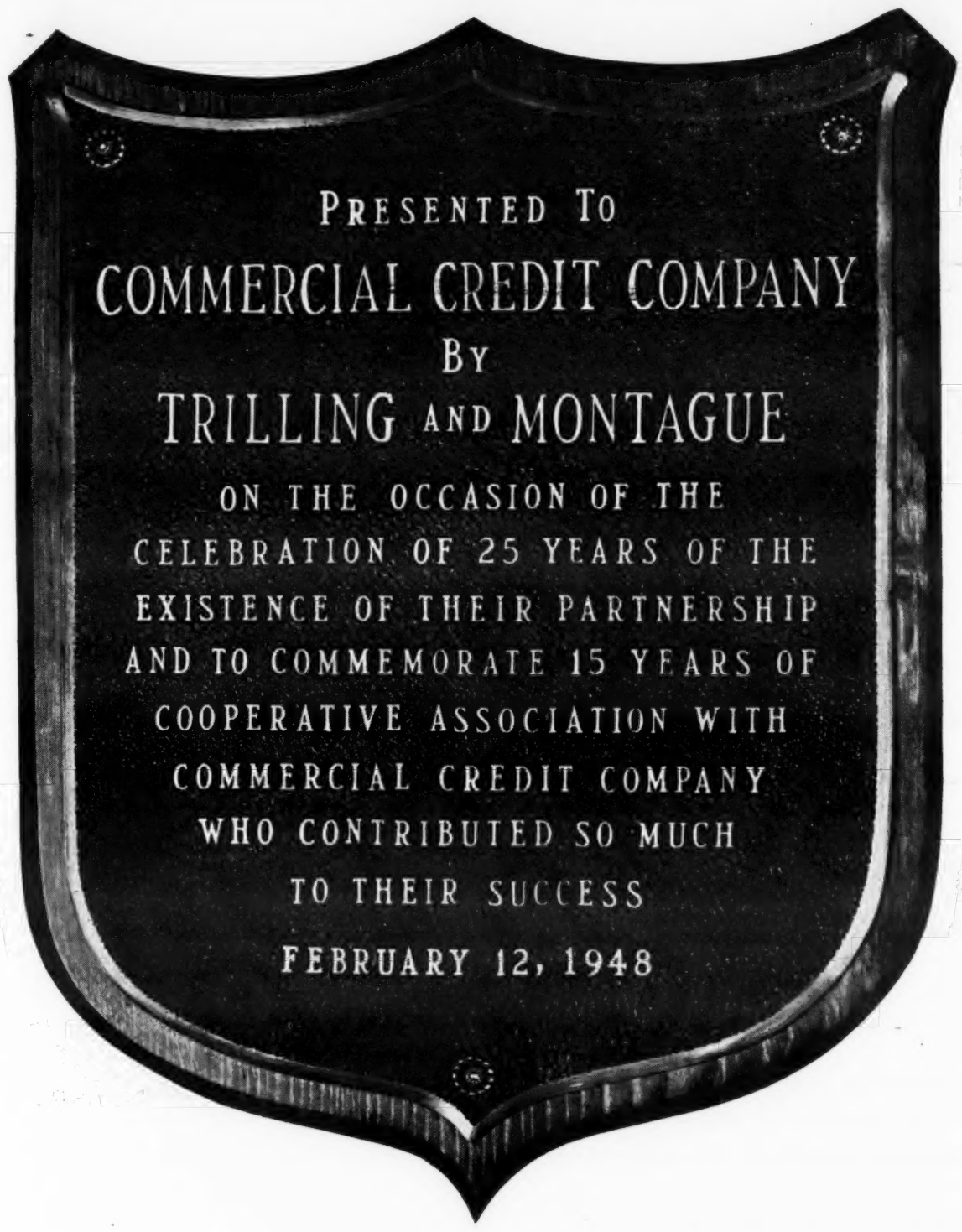
For complete details—descriptive literature, price lists, territories available write or phone E. George Sanders, General Sales Mgr. at 3120 N. Main St., Dayton, Ohio. (Temporary nat'l sales office.) Phone Randolph 2147.

Buxtonaire
Dry Cooler for Bottled Beverages and Food Products.

Manufactured by

BUXTON, INC.

1900 E. 48th St., Los Angeles 11, Calif.
(Phone Lucas 8158)



WHEN a deep mutual regard exists between business organizations, as between individuals, it can be mutually sensed without having to be put into words or demonstrated in formal fashion.

Nevertheless, when it breaks out and takes the form of a spontaneous tribute such as our good friends David Trilling and Harry Montague of Philadelphia publicly rendered us, our pride breaks out, too.

So, we take this means of expressing, in behalf of our country-wide organization, our sincere appreciation of their goodwill.

While in this instance the tribute was earned primarily by the continued good service of our Philadelphia office staff, we know that the 4000 men and women in our more than 300 offices across the land are equally on their toes . . . equally keen to render efficient service . . . and that their work is equally appreciated by the dealers whom they serve.

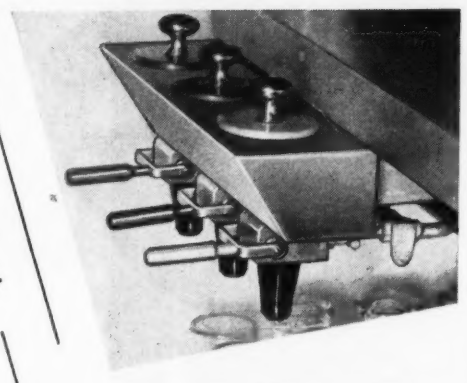
COMMERCIAL CREDIT CORPORATION

A Subsidiary of Commercial Credit Company, Baltimore

MORE THAN 300 OFFICES IN PRINCIPAL CITIES OF THE UNITED STATES AND CANADA

DEALERS and DISTRIBUTORS! every bar and tavern is a prospect for the

MULTI-FLOW Soda Dispenser



Flip Down the Handle
a finished mixed chaser
Flip Up the Handle
sparkling seltzer

The new MULTI-FLOW delivers perfectly mixed chasers every time. Flip the handle up for sparkling seltzer . . . down for ginger ale, lemon-up or cola —with proportions of syrup and soda water automatically controlled, no matter what the size of the drink. No costly and time-wasting handling of bottled drinks and empties; saves space because there are no large syrup tanks.

CHECK THESE SELLING POINTS:

1. *Compact—fits under any bar*
2. *All 18-8 stainless steel construction*
3. *Simple one-half hour installation*
4. *Eliminates pressure lines and valve adjustments*
5. *Freedom from service difficulties*
6. *Ready for use at all times*

Available in Single, Double and Triple Installations
Write, Wire or Phone for Complete Details and Low Cost

MULTI-FLOW DISTRIBUTORS
1921 FAIRMOUNT AVE., PHILA. 30, PA. • Phone: PO 5-2257

GENERAL STORE

Launderette May Become New Shopping Center

NEW YORK CITY — The old-fashioned general store may be coming back—disguised as a Launderette.

Plans now being drawn up by Telecoin Corp. indicate that additional coin vendors (marketing vegetable juice, canned fruit, coffee, ties, or hosiery) are on their way toward being installed in the firm's string of self-service laundries throughout the country.

Coupled with the system of mail-order merchandising of other goods recently inaugurated in Launderettes, the vendors will mark another big step toward making these neighborhood launderies a focal point of community activity.

Arthur P. Percival, president of Telecoin, believes that the Launderette currently enjoys a position analogous to the much-fabled general store as a natural gathering-place for the community. He commented that the informal atmosphere of a self-service laundry has a tendency to induce purchases.

"The remarkable way in which Launderettes have developed indicates that this type of consumer-service is meeting a basic need." Percival declared. "Also, the opportunities for additional selling are becoming clearly evident. The traffic of one of these centers should be a ready market for a variety of products."

Approximately 25 million cans of vegetable juice and milk are already set for initial distribution.

Scene from Kelvinator Home Freezer Film

Seven Broadway and Hollywood actors take part in "Surprise for Janie!", newest full-color movie about the home freezer. No concerted attempt is made to sell the Kelvinator freezer specifically. The important angle now, believes Sales Manager R. B. Trick, is to sell the "idea" of the home freezer.

* * *

'Non-Commercial' Movie Emphasizes Importance, Usefulness of Freezer

DETROIT—Newest contribution to the refrigeration industry's home freezer education needs is a full-color, 16-mm sound film, "Surprise for Janie!", currently being made available by Kelvinator for free local showings through distributors and zones.

The new movie, which runs 24 minutes, tells an entertaining and instructive story of a young married couple who learn how much a home freezer may contribute to better living.

Designed to help do an essential job for the industry as a whole, the pleasing, human-interest film emphasizes the value of the home freezer as the newest of the major home appliances, and does not attempt to sell the Kelvinator home freezer specifically. Its informative, non-commercial approach makes it especially useful for showing before women's clubs, student groups and general consumer audiences.

With a cast of seven Broadway and Hollywood actors, the film dramatizes the diversified use of the home freezer in the life of an American family. Preparation of foods for freezing, packaging, and the use of frozen foods in day-to-day meal service are demonstrated as the plot unfolds.

Commenting on the film, R. B. Trick, Kelvinator home freezer sales manager, pointed out that "at the present stage of market development in the home freezer business most of the sales effort should be pointed toward the 'need' and 'use' factors of a freezer in the home."

"Until the prospects realize what the freezer will do for them there is little use in discussing specific product features," Trick said. "Films and material such as 'Surprise for Janie,' doing an entertaining, educational job, can help a great deal with the market spadework that is necessary."

Supervised by the Kelvinator advertising and sales promotion department, the film was produced for Kelvinator by Caravel Films, Inc.

M. G. Johnson Heads G-E Division Purchasing

ERIE, Pa.—Appointment of M. G. Johnson as supervisor of purchasing, household refrigerator division Erie Works, General Electric Co., was announced recently.

Johnson joined G-E at Bridgeport, Feb. 1, 1935, in the advertising division, and in 1940 was appointed supervisor of that division. In 1942 he transferred to central purchasing at Bridgeport, and four years later was assigned to special assignments in the purchasing division. He continued at that assignment until January of this year when he transferred to the purchasing section of the refrigerator division in Erie Works.

Sunroc Pittsburgh Office Changes Personnel, Location

PHILADELPHIA—Harold G. Lacy, formerly a research director for the Sunroc Refrigeration Co., has been named Philadelphia branch manager for the water cooler firm's sales organization, The Sunroc Co.

Elizabeth Travers has been made office manager. The branch office has been moved to the Packard building here.

In this unit illustrating the complete refrigeration cycle, you can see the many Wolverine products that are used by the refrigeration industry. Among them is Wolverine Trufin, THE integral finned tube, fabricated as both a condenser and evaporator coil. Trufin can help you in many ways.

$DEAD SURFACE AREAS—Can be eliminated by coiling Trufin within the direct air blast from the fan to make use of every bit of surface area. You will no longer need to lose surface area at the center and corners of the coil.

$LOSS OF EFFICIENCY can be prevented. You can rely on Trufin to continue to deliver heat transfer efficiency as engineered. Trufin is integral. There is no bond between fin and tube that can deteriorate or otherwise be destroyed.

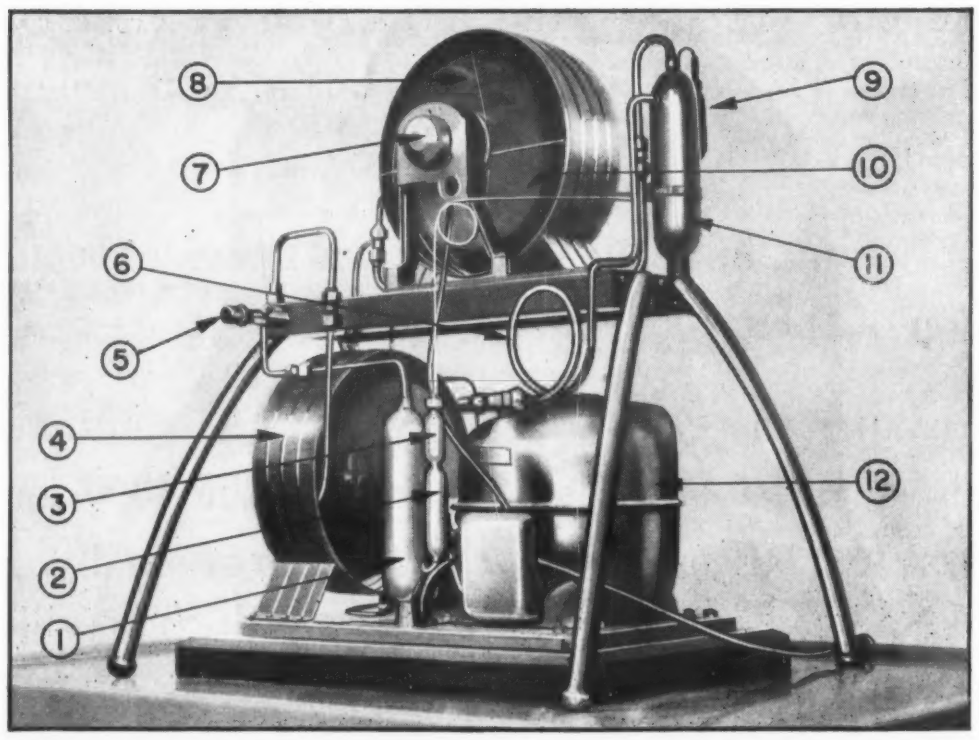
$CRITICAL MATERIALS in large quantities may be replaced by Trufin—helping you to avoid expensive delays.

$SPACE, always at a premium, can be conserved by using a compact and efficient coil of Trufin.

LEGEND

* 1 SPUN END RECEIVED—Copper.
* 2 DRIER—High side, 1" Diameter, 14 gram capacity.
* 3 FILTER—Copper, with conical Monel metal screen.
* 4 CONDENSER—$\frac{5}{16}$" I.D. x 9 fin aluminum tubing.
5 BACK-SEATING VALVES
* 6 SUCTION LINE—Copper.
7 MOTOR—Complete with fans—9 watts, 115 volts, 60/50 cycle, single phase, Type CW.
* 8 EVAPORATOR—$\frac{5}{16}$" I.D. x 9 fin aluminum tubing.
* 9 DRIER—Low Size, ¾" diameter, 7 gram capacity.
* 10 COPPER CAPILLARY TUBING—.081" O.D. x .031" I.D. 5 ft. long.
* 11 ACCUMULATOR—Spun end—copper.
12 COMPRESSOR—$\frac{1}{5}$ h.p.—hermetically sealed.

★Parts produced and fabricated from seamless, non-ferrous tube by Wolverine Tube Division, Detroit.



Wolverine Trufin is available in a variety of fin heights, fin spacings and in copper and aluminum. Trufin can be fabricated as readily as plain tube—end connections can be made easily.

Let us send you our technical reports on the use of finned tube.

WOLVERINE TUBE DIVISION
CALUMET AND HECLA CONSOLIDATED COPPER COMPANY
INCORPORATED
MANUFACTURERS OF SEAMLESS NON-FERROUS TUBING
1411 CENTRAL AVENUE • DETROIT 9, MICHIGAN

FREEZER SENTRY

BUZZ-Z-Z
when the Freezer breaks down . . .

● Every owner of a home freezer needs this signaling device to insure quick warning of mechanical failures. Whether you sell freezers or not you can sell the Freezer Sentry. Every day more freezers, without any signaling device, are being delivered in your territory. You know the owners. They need the Freezer Sentry. Particularly important for a rural owner at a distance from service facilities.

Here Is Why You Should Sell the Freezer Sentry

- **A package item. Installed by anyone in two minutes.**
- **Positive action. No thermostat to get out of order. A drop of mercury makes the contact.**
- **Battery operated. Trickle charger insures 5-year battery life and 100 hours buzzer operation.**
- **An extra good profit margin for you.**

Immediate delivery. Write today for descriptive material and price sheet.

JEWETT ASSOCIATES
1053 MAIN ST. BUFFALO 8, N. Y.

Recruiting Plan for Salesmen Gets Trial In Midwest Cities

CHICAGO—Nation-wide launching of the Nera Sales Personnel Plan for recruiting, selecting, training, compensating, and supervising retail appliance-radio salesmen has been announced by C. C. Simpson, managing director, National Electrical Retailers Association.

Designed to meet the need for retail sales manpower, the plan originated at the Nera Leadership Conference in January. Following the conference, the idea was fully developed for presentation to the industry. Active in the development were James Lee Pryor, James Lee Pryor Appliances, Wilmington, Del., national chairman of the Nera Committee on Sales Promotion; Edgar Ellman, staff consultant of The Personnel Institute, Chicago; and the Nera staff.

The services of The Personnel Institute, Inc., will be used in the selection of new salesmen, it is announced. The Personnel Institute has worked for various large firms as consultant in personnel administration, and has recently completed a study of personnel problems in the electrical industry.

A comprehensive folder describing the plan is being mailed to all Nera members. This folder gives complete instructions as to how dealers can set up a cooperative organization to use the plan in their communities.

Highlight of the Nera plan, said the managing director, is to do for the dealer things he hasn't time to do, and do them more successfully.

First step in the Nera Sales Personnel Plan is for a dealer committee in any given area to meet with local distributors and electric company officials to explain the plan and secure their full cooperation.

Under the provisions of the plan, the local electric companies allot advertising space to recruit applicants and establish a Central Agency to interview applicants and administer aptitude tests. Function of the distributors in the plan is to encourage dealer participation and provide necessary funds for supplementary advertising and stationery and supplies for the central agency.

Following the meeting with distributors and electric companies, dealers in the area hold a mass meeting, at which they are dinner guests of local distributors. The plan is explained and dealers indicate how many salesmen they need.

A recruiting campaign will begin immediately after the meeting with an extensive newspaper and radio advertising appeal. Strategy for the appeal has been worked out by Weiss & Geller, Chicago advertising agency. The appeal directs applicants to a central agency set up by the utility. This agency screens applicants, obtains completed application blanks, and checks applicants' references.

Qualified applicants are interviewed by dealers who have requisitioned their sales personnel needs. Applicants the dealers decide to hire return to the central agency and are given aptitude tests provided by The Personnel Institute. The Institute analyzes the tests and returns a complete report to the dealer within 24 hours. If tests are favorable, the applicant will be put on the dealer's payroll and will be enrolled in the EEI Sales Training Course, provided by the utility.

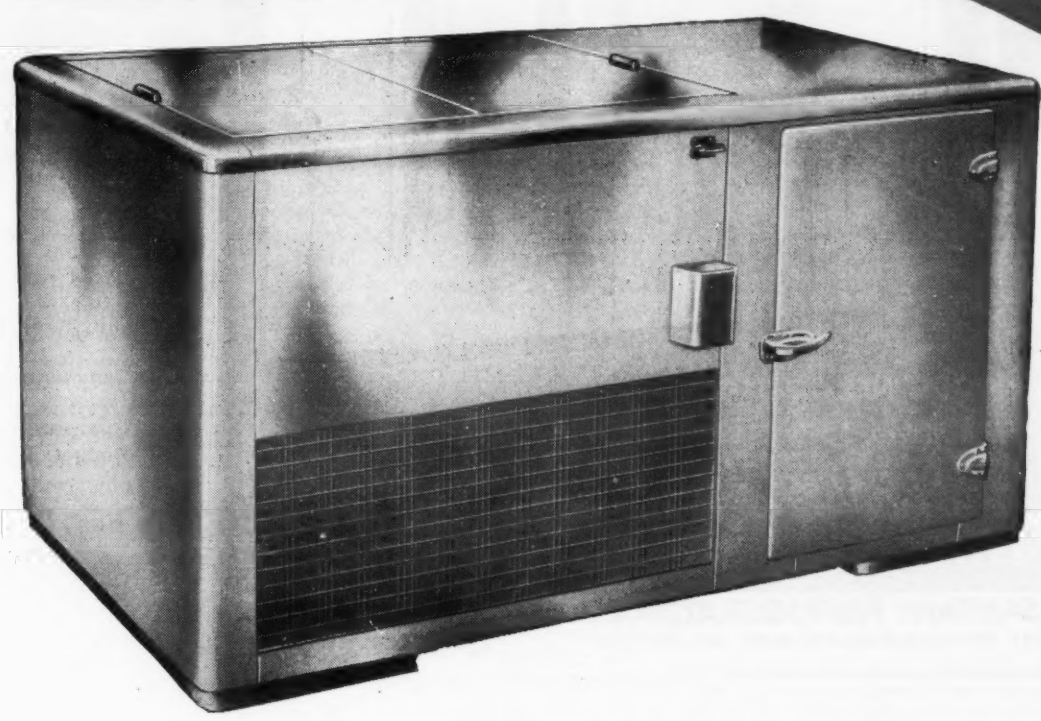
Servel's Profit for Quarter $959,036

EVANSVILLE, Ind. — Servel, Inc. here has reported a net profit of $959,036, equal to 51 cents per share, for the quarter ended Jan. 31. This contrasts with a loss of $782,317 for the corresponding quarter of 1947.

Cincinnati Firms Let Air Cooling Contracts

CINCINNATI—A number of contracts have been awarded the Cincinnati Air Conditioning Co. recently. These, according to Arthur Radke, general manager, include the new Kraft Food building on Mitchell Ave.; the Industrial Adhesives Co.; the Colony Restaurant; Raymond City Coal Co.; and the new Pleasant Ridge branch of the Fifth Third Union Trust Co.

ONLY ARTKRAFT HAS A COMBINATION FOOD and BEVERAGE COOLER THAT CAN BE OPERATED WET OR DRY



The ARTKRAFT BEV-FOOD

A High Quality, Self-Contained "Plug-in" Unit

- RETAILS AT ONLY $385 (f.o.b. factory)
- OFFERS THE LOWEST COST PER CUBIC FOOT USABLE REFRIGERATION SPACE IN THIS SIZE RANGE.
- EACH COMPARTMENT CAN BE USED ENTIRELY FOR DRY REFRIGERATION
- TOP OPENING PREVENTS "SPILL-OUT" OF COLD

IDEAL FOR:

RESTAURANTS, ROADSIDE STANDS, DAIRY STORES, HOTELS, TAVERNS, FISH MARKETS, FACTORY CAFETERIAS, HOSPITALS, SODA FOUNTAINS, BOWLING ALLEYS, MEAT MARKETS, DELICATESSENS, CANDY STORES, DRUG STORES

SPECIFICATIONS:

Sealed cabinet: 65⅜" x 38" x 29½"
Solid 3" insulation—Vermin-proof
Top compartment: 35¾" high x 20¾" wide x 15½" deep (Slightly over 6½ cu. ft.)
Food compartment: 21¼" wide x 28⅞" high x 20¾" deep (Slightly over 7½ cu. ft.)
Total storage capacity: 14 cu. ft.
Finish: Exterior—Silver Blue
Interior—Porcelain enamel
Top and 2 sliding covers, stainless steel
Condensing Unit: ¼ H. P., twin-cylinder air cooled Equipped with Tecumseh, Universal Cooler, or Copeland unit
Motor: ¼ H. P., 60 cycle, single phase, 1750 r.p.m., 110 volts, capacitor type
Refrigerant: F-12 Freon
Automatic light in food compartment
8-point cold control

DEALERS:

Ask your distributor for this great profit-maker—or write us for his name. Distributed in many areas by G. E. Supply Corporation.

DISTRIBUTORS:

Write for details of franchise for open territory

The Artkraft Manufacturing Corp.

Quality Products for more than a Quarter of a Century

200 KIBBY ST., LIMA, OHIO, U.S.A.

THIS COUPON FOR YOUR CONVENIENCE

THE ARTKRAFT MANUFACTURING CORPORATION
200 KIBBY ST., LIMA, OHIO, U.S.A.

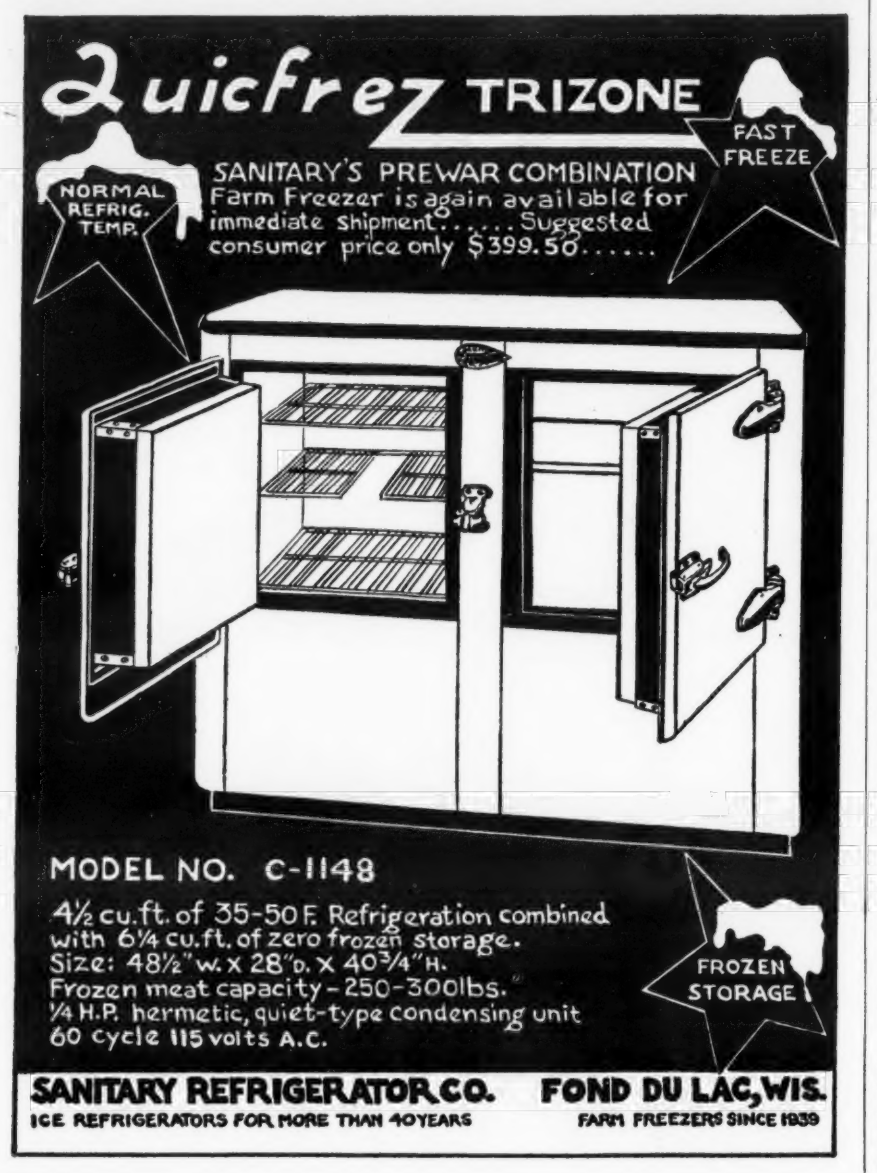
☐ Please send the name of the BEV-FOOD distributor in this territory

☐ Please send details of distributors' franchise

NAME.....

FIRM.....

CITY.....


Quicfrez TRIZONE
FAST FREEZE
NORMAL REFRIG. TEMP.
SANITARY'S PREWAR COMBINATION
Farm Freezer is again available for immediate shipment..... Suggested consumer price only $399.50.....
MODEL NO. C-1148
4½ cu.ft. of 35-50 F. Refrigeration combined with 6¼ cu.ft. of zero frozen storage.
Size: 48½" w. x 28" d. x 40¾" H.
Frozen meat capacity - 250-300 lbs.
¼ H.P. hermetic, quiet-type condensing unit
60 cycle 115 volts A.C.
FROZEN STORAGE
SANITARY REFRIGERATOR CO. FOND DU LAC, WIS.
ICE REFRIGERATORS FOR MORE THAN 40 YEARS
FARM FREEZERS SINCE 1939

Dealer's Advertisement Stresses 'One-Stop Shopping'

PITTSBURGH — "One-stop shopping," a time-saving merchandising feature that has proved a boon to the supermarket, can prove just as profitable for the appliance dealer.

Spear's store here believes in it strongly enough that he ran a seven-column advertisement in a Pittsburgh newspaper emphasizing that his store was a "Home Appliance Center" for the foot-weary shopper.

No need to "run all over town" to see what's available, the advertisement says, the patron can compare the "great" names in appliances all on one floor at Spear's. The advertisement further advises homemakers to "use this page as your catalog of new home appliances."

Divided into four rows (one for each manufacturer) the display carries sketches of 20 different electrical appliances including refrigerators, home freezers, ranges, and washers.

Highlighted in the advertisement are:

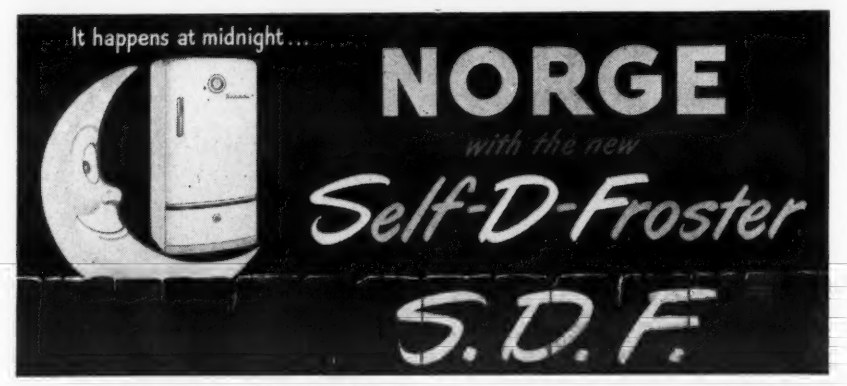
1. Demonstration by a home economist.
2. Guaranteed service.
3. Budget payments.

Ben-Hur Distributor Appointed

HOUSTON, Tex. — The Covington Distributing Co., 34 North Hamilton, has been named distributor in the Houston area for the Ben-Hur farm and home freezer, A. B. Covington, owner, has announced.

Here's a 'Teaser' . . .

. . . That's Getting Response



Part of a campaign that kicked off Feb. 15, the Norge promotion got hold of consumer interest by running the top picture alone for two weeks. Then, with curiosity running high, the lower ad would appear to solve the mystery.

* * *

Norge Pushes Automatic Defrosting Model by Stirring Public Curiosity

DETROIT — Initial phases of an unusual billboard advertising teaser campaign which has nudged the nation's curiosity bump for the last month have just been completed by the Norge division of Borg-Warner Corp., according to C. H. MacMahon, director of advertising and public relations for the division.

Primarily a postwar promotion, the plan was launched in mid-February on boards of 152 major cities in order to provide a strong public introduction for the company's new line of automatic defrosting refrigerators.

Key to the whole program was a set of two posters, the first of which featured a yellow moon shining across a board fence upon which had been painted the letters "S.D.F." Against the deep blue background of the night sky appeared the words, "It Happens at Midnight. . . ."

This was followed two weeks later with a poster which revealed that the letters "S.D.F." stood for "Self-D-Froster," and announced that the new Norge refrigerator defrosted itself automatically each night at midnight. The moon, fence, letters "S.D.F.," "It Happens at Midnight . . ." and an illustration of the refrigerator were basic elements of the design.

Where boards were available, the first of the two posters was pasted up Feb. 15; where not obtainable on that date first showings were made March 1. In each case, however, the second poster appeared two weeks after the first one.

This activity was paid for by the factory and was supplemented with a wide variety of advertising and sales promotion aids made available to distributors and dealers under the company's cooperative advertising plan.

Among merchandising aids made available were a set of six matted newspaper advertisements ranging in size from 1,000 lines down to 42 lines on two columns. Other material included window stickers, store interior hanging signs, give-away blotters, counter cards, pick-up folders, specification sheets, catalogs, and a special window display. Also in the proferred package were a number of suggested 20-second and one-minute spot radio announcements.

In addition, current national magazine advertising was designed to assist in the promotion of the automatic defrosting feature.

According to MacMahon, many of the Norge distributors did not content themselves with mere utilization of factory material. Instead, they conceived special promotions to advance the program further. Generally these took the form of material prepared by the distributor which urged the dealers not to miss their big opportunity to cash in on the plan, and special radio spot announcements. One distributor prepared a telegram, and other had special mailers tailored to their areas.

The Cincinnati and Salt Lake City distributors employed radio to offer prizes for the best guesses as to what "S.D.F." stood for, while in Chattanooga the public was constantly asked the question, "Have You Seen the Full Moon?"

Even more elaborate was the activity of the New Orleans distributor who had his dealers whitewash their display windows and had six-foot high letters, "S.D.F." painted on.

Coming Your Way!

A Brand New Profit Opportunity with famous PURO water coolers

After 50 years of direct sales policies, the nationwide demand for PURO Water Coolers obliges us to let *dealers and service organizations* share in PURO'S success.

We invite applications from dealers who want to profit through selling and servicing famed PURO Coolers.

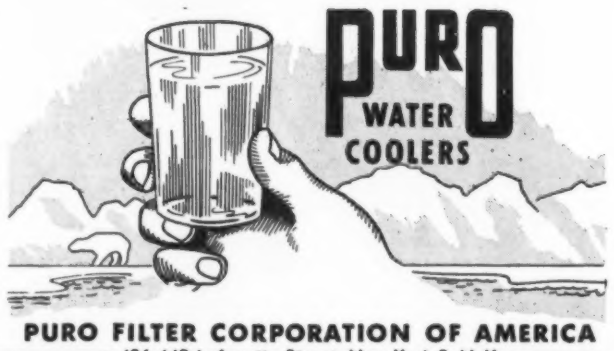
PURO is a truly GREAT name in water coolers. Built primarily for rental with trouble-free operation, we just had to make a quality product. That's why PURO tops competition on every comparison. PURO offers sturdier construction, better insulation, greater capacity, greater ease of servicing.

Sell or Rent, as you prefer. But if you want repeat profits year after year, rental is the better deal for the dealer.

If you qualify, we can deliver *all* models of our great 1948 line. We are in full production.

Where dealer business warrants, we will help with advertising and sales aids.

Write for full details—today, describing your business and giving references.



PURO FILTER CORPORATION OF AMERICA
436-440 Lafayette Street, New York 3, N. Y.
Cable address — "Centadrink, New York"

ACCURATE . . .
RUGGED . . .
COMPACT . . .

Bulletin 836
PRESSURE SWITCH

Available for pressures between 30-in. vacuum and 500 lb sq in. Metal bellows operate a reliable snap action precision switch, which has no levers, hinges, or pivots. Range and differential can be easily adjusted in the field. Also, see the Bulletin 837 Temperature Control. Write for full information. Allen-Bradley Co., 1313 S. First St., Milwaukee 4, Wis.

A-B Quality
ALLEN-BRADLEY
QUALITY
MOTOR CONTROL

INSIDE DOPE

by GEORGE F. TAUBENECK

(Concluded from Page 1, Column 1)

"Selling all her wool to England, France, or Belgium makes Australia prosperous but it does not enable her to buy one cent's worth of American goods; that can only be done with dollars and the possession of all the francs or sterling in the world will not give Australia dollars. All the dollars spent by the British Commonwealth come from a pool which is filled from two sources only: one is the proceeds of the American loan to Great Britain, which is rapidly being exhausted; the other comes from whatever Great Britain or Australia or other British countries contrive to sell to America. The thing goes round in a circle. Similarly the selling of French wines and silks to Austrialia helps France, but it does not enable her to buy American exports.

"For every car that the Ford Motor Co. wants to sell abroad it is up to Ford to see that some American buys the equivalent amount in foreign goods. That is, of course, unless Ford prefers America to go lending dollars without being paid back. It is understandable that no matter what it is proposed that America import, whether it is wool or wine, someone will get up and say that there is an industry in America that needs protection. That is America's problem.

"It is for other nations simply to point out that if she does not import, certain results will follow. The rest of the world will suffer but it will not be ruined. To the extent that Fords or Chevrolets cannot be got, we shall either manufacture ourselves (which are are already preparing to do), or get along with less suitable models and make old ones last longer. Ten to fifteen-year-old automobiles are quite common in our streets today.

"The first result of American refusal to import will be an enormous stimulation of competitive industries throughout the world. It will not be necessary for anyone consciously to organize a 'sterling bloc.' The bloc will just be there through force of circumstances. The articles to be manufactured may or may not be as good and as cheap as American ones, but if the purchaser has no dollars he either takes them or goes without.

"Not the least of the causes of the last war was the complete disunity of the non-fascist, freedom-loving world. Do we want the same disunity in the face of a possible atomic war? Economic self-sufficiency and tempers frayed by bad trade relations will certainly foster it."

In the end, only greater production in all countries, combined with the achievement of the freest possible convertibility of all kinds of money, will solve the world's problem. And in the interim, only the United States has the wealth and power to assist other countries in getting back to a more productive basis.

Are You Amused?

It is said that England and America are two congenial countries separated by a common language.

It is also said that Englishmen have a perverted sense of humor. Whether they do or not, we leave you to judge after reading the following prize-winning jokes recently published in a London newspaper:

The landlady's little boy, Johnny, always had to have a story read to him before bed, out of the "Bible book." I was honoured to hear one of these, which was the one about the leper.

When it came to the part where the sick man was bidden to "take up thy bed and walk," poor Johnny nearly broke down as he exclaimed: "I thought Jesus was a kind man—well, why did He tell a sick man to get up and carry his bed, when He could have got Carter Paterson to do it?"—from S. D. Thomson, 84, Whetley Hill, Bradford, Yorks.

In 1937, my friend and I were in Germany. As we were walking along the road we saw a column of the vaunted Wehrmacht approaching, headed by staff cars. My friend, thinking he should be polite in a foreign country, stopped and raised his hat to the general in the leading car, who flabbergasted him by saluting smartly.

Before he could replace his hat and walk on with me, however, the entire division was upon him and marching "eyes right," with officers at the salute, much to my secret amusement and his terribly British discomfiture.—From H. G. C. Roger, Neidpath View, Caledonian Road, Peebles, Scotland.

Shopping Is So Absorbing

On holiday in the resort that since has become my permanent home, I one day saw a woman dash out of a provision-shop screaming: "My baby! My baby!"—quickly drawing a crowd.

"What's wrong with it?" inquired an old gentleman.

"Oh, sir. I've lost it!"

"Perhaps you left it in the shop," the old gentleman suggested, solemnly.

Back into the shop rushed the woman. A moment later she emerged, a baby in her arms.

"I left him on the counter," she said.—From H. Bavter, 97, Teignmouth Road, Torquay, Devon.

We were motoring in rural England in war-time. We stopped and asked a yokel the way. He stuttered so badly that it was embarrassing. We excused ourselves and drove on.

We stopped and asked a second yokel the way. He stared vacantly. We had picked the village idiot. We drove on.

We stopped and asked a third yokel the way. He was stone deaf. We drove on.

And we got lost.—From R. Thomas, 49, Crystal Ave., Cardiff.

The Plotter!

Scene: Victoria Station.

Platform lined six-deep with holiday-makers waiting to scramble for seats on incoming train.

As train drew in, a large woman turned angrily to her meek little husband and demanded: "*Why* must you *always* arrange for us to stand opposite a luggage van?"—From G. A. Weller, 31, Balmuir Gardens, London, S.W.15.

'A Race of Men Has Died'

The following contribution to the "Letter Box" of a Detroit newspaper deserves wider circulation:

"The laboring man is heard on all sides crying to high heaven about the rising cost of living. He appeals to his union to intercede for him and ease his burden with an increase in wages. This has been going on for a long period of time and labor has made definite gains. Wages have risen, the work-week has been shortened in most cases, safer and pleasanter working conditions are now the accepted order of the day.

"The average man now has a car, a home, a yearly vacation, some measure of security against unemployment. He has his hobbies and the time to devote to them. If he is the thrifty type he has savings of some sort against an emergency. He undoubtedly plans definitely to send his children to college.

"In exchange for all this, what does HE give? The absolute minimum of work, done as slowly and as easily as possible. He is exhausted and worked to death to hear him talk, on the job. But let someone mention golf, bowling, a fishing trip, and he immediately is fired with enthusiasm and full of energy.

"The papers during this hot spell have daily carried reports of the numbers of so-called 'men' who have walked off their jobs because of the excessive heat. Shame on these men who cry one day that their wages are insufficient, and the next day refuse to work! They make liars of themselves!

"How times have changed in the last decade! Remember when we were glad to have the opportunity to work? Remember the bread lines and the soup kitchens?

"We can have short memories when it suits us, but those days will return again unless the average man changes his tune and decides to give again an honest day's work for his wages. I think it impossible. A race of men has died. God help their sons.

A. R. N."

Peering Into the Future

When atomic energy is used to generate electricity—and that day does not appear too far distant—then cleaner, healthier, smokeless American cities will result.

So Arthur C. Babson tells us.

"An official report of possible industrial uses of atomic energy estimated last year that with the price of coal delivered on the eastern seaboard at $10 per ton, electric power could already be generated as cheaply by atomic energy as by steam-heated coal in the large Eastern coastal cities with indications that future costs would be greatly reduced," Mr. Babson insists.

"Coal smoke," he asserts, "is a curse visited on all great eastern and middle western industrial cities. One authority has estimated that it costs the nation in the vicinity of $500,000,000 per year, of which cleaning and damage to property amounts to $140,000,000 per year.

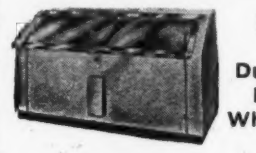
"Through generating cheap atomic heated steam in central plants for distribution throughout the cities, the smoke from hundreds of thousands of urban chimneys could be largely eliminated. This, with the conversion of large industrial plants and electric power houses to producing steam by atomic heat, would allow a clean and healthy atmosphere in our great cities.

"Atomic power could well be the force to stem this tide (of urban decentralization) by making large cities more desirable places to live in and less expensive places in which to do business.

"It is an ironic fact that atomic energy, which offers so much in the way of making our great cities better places in which to live and do business, is also the greatest threat to the very existence of these same cities.

"Failure to control the destructiveness of atomic energy points down the road to national disaster, while proper utilization of man's most potent discovery can lead us to new heights of human endeavor."

DEALERS WANTED



The Bev-Kold Cooler Dulux Baked Enamel—White, Green, Beige

Model DB 6-21
Self-Contained
29½" x 40" x 6' long
Also 4, 8 and 10' Lengths

Remote Installation
36½" High
Write For Details

THE BEVCO COMPANY

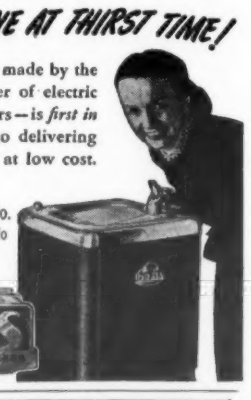
BEVCO MAID

1512 PINE ST., ST. LOUIS 3, MO.

1'ST IN LINE AT THIRST TIME!

OASIS — made by the world's largest maker of electric drinking water coolers — is *first in line* when it comes to delivering complete thirst relief at low cost. Write for details.

The EBCO Manufacturing Co.
401 W. Town St., Cols. 8, Ohio



OASIS ELECTRIC WATER COOLER

ENGINEER WANTED

We require an assistant chief engineer for a permanent position with the following qualifications:

Graduate engineer. Thorough knowledge of rating refrigeration and air conditioning coils. Practical field experience covering coil and compressor problems. Must be aggressive and ambitious. Age 30 to 40 years.

The position is one of responsibility, and an excellent opportunity awaits the man who can qualify. Give complete resume of yourself in first letter.

BETZ CORPORATION, Hammond, Indiana

Grand!*

The Grand Canyon of the Colorado River, in northern Arizona, is the greatest canyon on earth—200 miles long, eight to ten miles wide, more than a mile deep in many places. The bared rocks, in their riot of reds, buffs, greens, and white, represent geologic time from the oldest known to the present day. Discovered by Cardenas in 1541, it has been a National Park since 1919, a tourist magnet of great importance—and rightly called "the most sublime spectacle in the world."

* *A favorite adjective employed by users to describe their Mills Condensing Units.*

Mills Condensing Units

Products of Mills Industries, Incorporated
4100 Fullerton Avenue, Chicago 39, Illinois

Grocer Education on Use of Refrigeration Equipment Called Vital to Profitable Frozen Food Departments

Shopping Must Be Easier, Food Authority Advises

CHICAGO—There is a great need for an educational program to impress upon grocers the necessity for proper use of frozen foods equipment and the proper display of packages if frozen foods departments are to be profitable operations, according to Bee Strawway, food merchandising manager of *Life* magazine.

"In spite of the undeniable convenience of cooking frozen foods, shopping for them is not always easy," Miss Strawway told the National Wholesale Frozen Food Distributors, Inc., during its convention at the Congress hotel here. NWFFD's meetings were held concurrently with the recent National Frozen Food Industry Convention and Exposition.

"And yet," she continued, "it would seem to be a simple matter to choose from a variety of frozen foods those that will tempt the appetites of any family.

"In one store not long ago I noticed a customer leaning over a make shift cabinet and probing about—picking up one heavily-frosted package after another in an attempt to make out what the label indicated.

"She gave up finally and walked over to a nearby shelf and took from it immediately, with little or no lost motion, a can of the product she wanted. Tempted—and sold—by a beautiful label and the convenience with which the product was immediately accessible.

"Unfortunately, she was not an isolated case. Many women have described similar experiences and because grocery store shopping does not rate high among the pleasanter things homemakers have to do, their impatience means loss to the grocer in that department—to the distributor and to the packer."

Miss Strawway advocated the educational program in a talk urging food retailers to merchandise "to the hilt the pre-selling work that has already stimulated the impulse to buy." Stressing that women are impressionable and that their curiosity and impressionability "can be guided and directed to your best interests, she noted that the grocery business is discovering how to create impressions.

"For years, we have been told that color has a wide range of influence upon the human nervous system," she said. "Hospitals have long used soft yellow and pale green shades on the walls of their rooms because of the calming influence those colors have on patients.

"Now, under the direction of one of the country's leading industrial designers, one of the most beautiful supermarkets in the U. S. recently opened on the West Coast, putting to effective use that knowledge of color influence.

"What happened? It has affected customer pace—it has lessened irritation among store personnel—work progresses more smoothly throughout the store. . . .

IT'S DONE WITH MIRRORS

"Although the color scheme in the rest of the store is pale yellow, the wall behind the produce department resembles a garden. Through the use of mirrors and a giant mural, which spreads the entire width of the huge market, they have developed a beautiful and refreshing background against which lush fruits and vegetables show up to the best advantage.

"In that store, as in any other progressive market, constant attention is given to perishable merchandise. Careful trimming and refreshening of the produce goes on throughout the day so that it looks always at the peak of freshness and desirability.

"The same amount of care should be given the frozen foods department. . . .

"We all know that the good store is laid out to allow the customer to shop with a minimum of conscious effort. Wide, inviting aisles. Merchandise out where she can readily see it, examine it, consider ways she may serve it.

"That's taking advantage of what we know about consumer reaction. You know these improved methods of selling are effective because customers prove it by increasing their buying in those stores that use them. Now put yourself in the retailer's shoes for a moment.

"Tell the customer what you want her to buy and let her see why she should buy it.

"No woman hurries out to buy a jar of cold cream because she looks forward merely to swirling it around her fingers—just to prove how smooth it is. She wants that cold cream—or that nail polish—or that soap because she has been PRE-SOLD on what it will do for her. . . . Why shouldn't we use that same approach to sell more food? . . .

VISUAL SELLING SETS STAGE

"Planning meals three times a day, 365 days a year, is one of the most challenging and monotonous parts of any homemaker's job. No wonder most women become deadly bored with the sameness of it—the monotony of trying over and over again not only to tempt appetites and to give her family adequate nutrition, but simply to put some fun into what necesarily becomes a routine job for her.

"These same women will spend hours shopping through department stores, specialty shops, variety stores—up and down aisles, looking in windows—tirelessly! Yet they begrudge every moment they have to spend in a grocery store!

"The food merchants who make any effort to change her point of view are notably successful. They make sales history. . . .

"A basic part of the success of businesses catering to women—businesses dedicated to creating impressions upon the impressionable customer—is visual selling. They set the stage for buying. They show why customers should buy—merchandising to the hilt the pre-selling work that has already stimulated the impulse to buy.

"One of the first copy book rules I ever learned was this: When writing advertising to sell women you avoid the too 'direct approach.' It seems women like to feel that they come to a decision their way.

"The 'inductive' approach, copywriters call it. It means, simply, that you induce the reader or the customer to be interested first and learn why she should buy.

(Concluded on next page)

One of 'Get Togethers' at Frozen Food Show

During the National Frozen Food Industry Exposition, key personnel from Victor Products Corp. got together with a few staff members of Haskris Co., Chicago distributor for Victor. In the above group (left to right) are: J. K. Noel, Sr., president of Victor; J. K. Noel, Jr., vice president and sales manager; Frank Haas, Haskris president; John Thiele, district manager for Haskris; Norman Norris and Joseph Polony (both of Haskris); an unidentified man; Robert P. Christensen, vice president of Haskris; Bert Carlson, divisional representative for Victor; and (in front) Roy Hippert, of Haskris.

* * *

Show Visitors Saw This Display Cabinet . . .

Visitors to the Coolerator booth at the National Frozen Food Industry Exposition in Chicago March 15-18 learned how the firm's Model F-151 heavy-duty freezer can be used as a self-service display cabinet in retail stores. Note product listings and new visual selling aid in color that can be employed to promote frozen food sales.

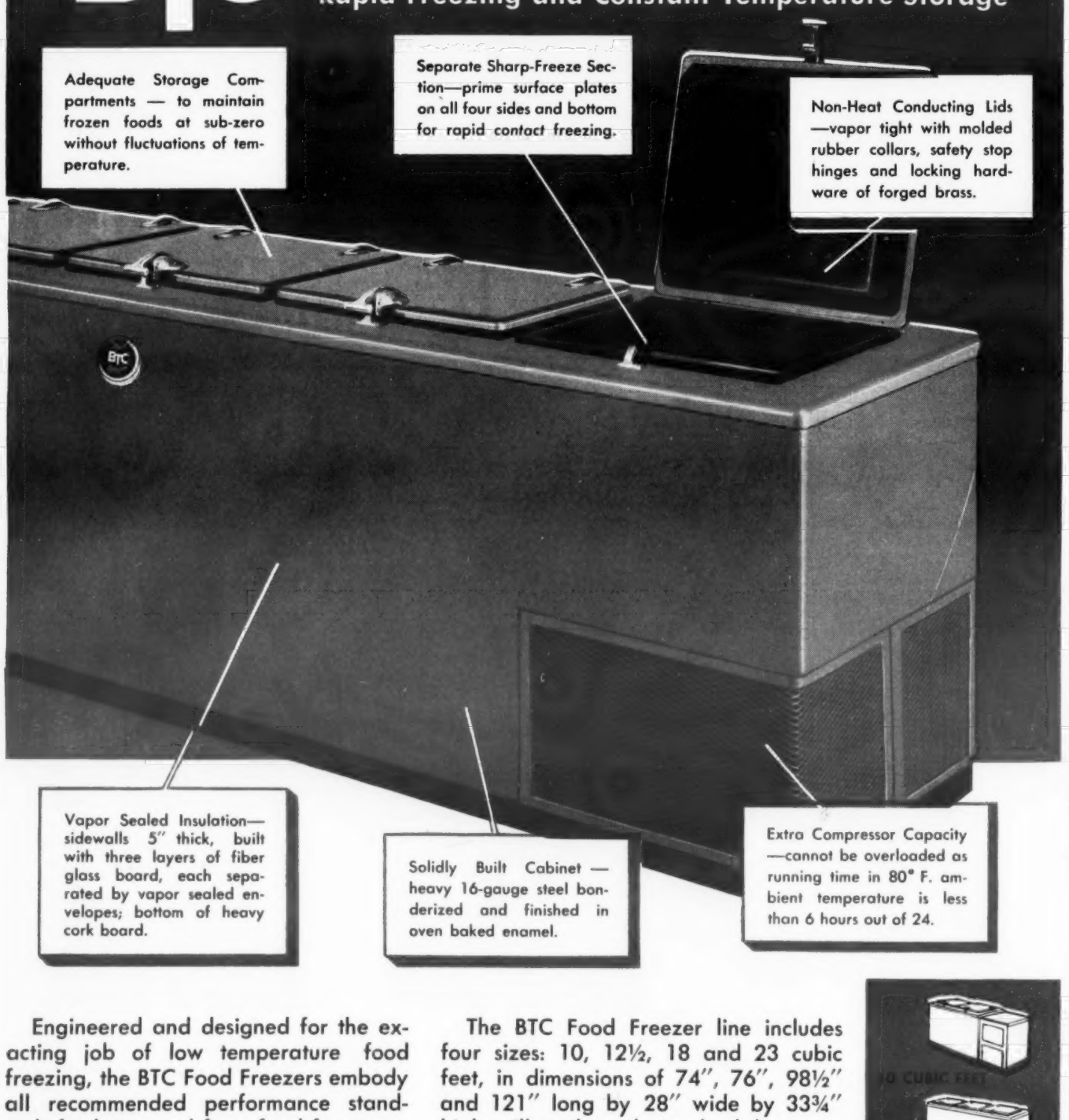
* * *

And New 'Upper Structure' for Supermarkets

Directly under the company name are the new Vitavision three-dimensional 20 by 24-in. color plates introduced by Refrigeration Corp. of America at the frozen food exposition in the form of an "upper structure" for frozen food departments. Intended to stimulate impulse buying, this type of selling aid was described as "the next move in supermarket merchandising."

BTC FOOD FREEZERS

Rapid Freezing and Constant Temperature Storage

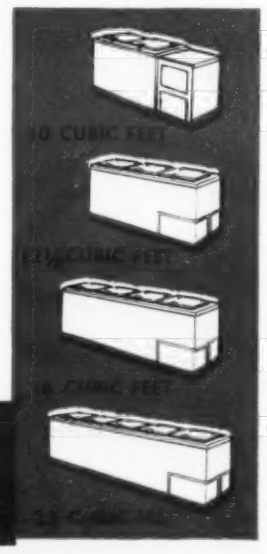

Adequate Storage Compartments — to maintain frozen foods at sub-zero without fluctuations of temperature.
Separate Sharp-Freeze Section—prime surface plates on all four sides and bottom for rapid contact freezing.
Non-Heat Conducting Lids —vapor tight with molded rubber collars, safety stop hinges and locking hardware of forged brass.
Vapor Sealed Insulation—sidewalls 5" thick, built with three layers of fiber glass board, each separated by vapor sealed envelopes; bottom of heavy cork board.
Solidly Built Cabinet — heavy 16-gauge steel bonderized and finished in oven baked enamel.
Extra Compressor Capacity —cannot be overloaded as running time in 80° F. ambient temperature is less than 6 hours out of 24.

Engineered and designed for the exacting job of low temperature food freezing, the BTC Food Freezers embody all recommended performance standards for home and farm food freezers.

BTC Food Freezers are made by The Brewer-Titchener Corporation, specialists in metal fabrication for over 100 years and manufacturer of the famous BTC Evaporator Plates.

The BTC Food Freezer line includes four sizes: 10, 12½, 18 and 23 cubic feet, in dimensions of 74", 76", 98½" and 121" long by 28" wide by 33¾" high; will go through standard doorways easily; and with ⅓ hp., 110-120 V. and ½-hp., 220 V. motors.

A limited number of dealer and distributor franchises are available. Write for complete bulletin.



THE BREWER-TITCHENER CORPORATION

Crandal-Stone Division--Binghamton, N. Y.

NWFFD Hears How To 'Woo' Women Shoppers

(Concluded from preceding page)

"If you study magazine advertising you'll agree that advertisers are indeed skilled in ways to induce them, to pre-sell them. The supermarket of today and tomorrow—the self-service store—is a masterpiece of that selling psychology applied where it will do you and the dealer the most good, the place where pre-selling pays off. . . .

"Of course, the dealer can't be Johnny-on-the-spot when customers see product advertising in the home—when the pre-selling actually starts. But the retailer can make sure that when she buys the product on which she has been pre-sold, she'll buy it in his store. Because—and retailers prove this, day in and day out, in city, town and village—when they use the advertising WITH the product in his store, that ad becomes the dealer's personal advertising just as surely as if he had put his own signature to the bottom of it.

"You, as distributors and distributor salesmen, you are dealing in taste appeal and eye-appeal. Dealing in a commodity that can make retail grocery stores as exciting to shop in as any other dedicated to wooing the feminine shopper.

"Look at the windows of your nearby department store (your customers do!). What do you see? Suits, coats, hats, dresses—carefully displayed on attractive figures, every item carefully chosen to match or blend with the others. Even a pair of gloves is shown with an attractive bracelet to focus attention on both. Each helps sell the other. . . .

"When you remember that 87% of the sensations that the average human being receives are received through the eyes, you begin to realize the potential power of visual selling. Eye-appeal was not simply a lucky combination of words put together by a casual dreamer. It's doubly important now as more and more stores swing over to self-service.

"No retailer could possibly afford a sales person for every potential customer who enters his store. Yet, skilled merchandising, strengthened by visual selling at his own point of sale, does the selling job for him profitably.

"*Progressive Grocer* made an exhaustive survey recently of the likes and dislikes of grocers for various kinds of display material. Only 2% wanted less display material. A third will use about as much in the future as at present. Nearly two-thirds will use more. . . .

PRICE SIGNS ESSENTIAL

"It's interesting to note, also, that 57% of those dealers questioned replied that they would use magazine reprints. Last June at the NARGUS Convention in San Francisco, John L. Morrison, of Norman, Oklahoma, spoke and in his own words, let me quote his experience:

"'In self-service stores where contact with the customer is more casual than in service stores, the use of talking signs is a powerful sales force. Signs giving price on each item are essential, but signs giving a reason for buying, other than price, are sales promoters.

"'Such appeals can best be made by descriptive words and eye-catching pictures, by stressing ease of preparation, low cost per serving, by showing the satisfaction that will result from serving the dish. Many of us have given too little thought to the great possibilities of this sales technique. Yet, wherever we have used it, sales have been given sharp boosts upward.

"'A Ritz cracker display with a price ticket alone upped sales 40%. When a magazine color ad was added, the sales *jumped 121%*.'

"In a study made by Du Pont sometime ago, they discovered that two out of five items are purchased on impulse. Well, a customer behavior pattern like that spells opportunity for every retailer, every distributor's salesman. Help them sales-condition their store with productive displays.

"The smart retailer makes sure people realize that he has the brands they read about. Nationally advertised brands are, to thousands of women throughout America today, the magic words that mean quality products.

"The same woman who insists upon a nationally-known washing machine, a famous-make toaster, a nationally advertised cosmetic, is demanding, with increasing insistance, well-known grocery products. After all, food is the most important purchase she makes.

"Ask her to describe what she means by quality foods, and the chances are she'll specify an advertised brand. Why? Because those names have become synonymous with quality through consistent education, through advertising. . . .

"For those who not only want to survive, but surpass competitive products, the importance of promotions, local and regional at least, cannot be over-emphasized.

"This is especially true of frozen foods because of: 1) the amount of inferior quality merchandise that, in all too many instances, deluged the consumer during the war years; and, 2) because of the educational challenge involved to show consumers that frozen foods are economical, easy to prepare, and having maximum full, fresh flavor.

"Just as famous name stars are good box-office and get the crowds into a theater, so known names in the food world can attract customers into the retailer's store. Then, when they get in, turn the spotlight on the names that brought them in.

"No dealer can take for granted that customers know he stocks them. Every inch of space is valuable. So make it pay. . . .

"Recently, a large chain . . . demonstrated their concern with establishing their stores as headquarters for famous brands. In a recent issue of *Sales Management*, the magazine published an interview with Joseph B. Hall, president of the Kroger Co.

"The article started out with a question:

"'Why did the Kroger Co., third largest grocery chain in the world and one of the strongest advocates of private brands, switch its policy of selling to give equal emphasis to nationally-advertised brands in its 2,600 stores. . . .

"'Why did Joseph Hall, president of the chain, dream up one of the largest promotional campaigns of its kind ever to announce this change to the public, discarding scores of private brand names upon which the company had spent thousands and thousands of dollars?

"'The answer from Hall was that the chain had decided to cater to The People's Choice. . . .

"'Today we are interested in selling the consumer what she wants. The trend is toward self-service. The Kroger salesman is no longer in a position even to influence, let alone determine, the customer's choice.

"'We operate a merchandising democracy. The customer does the voting and she votes every day. Our job is to move merchandise through the stores—fast. And we do that job by following the line of least resistance.

"'It's not what we want to sell the public. It's what they want to buy! Try to sell the customer something she doesn't want and you don't have merchandising—you've got inventory!'"

How Frozen Food Dispenser Was Promoted

This display of the Frez-O-Mat, an automatic self-service frozen food and ice cream dispenser, drew many a visitor to the recent frozen food exposition in Chicago into the booth. The company reported steadily increasing use of the dispenser in supermarkets and other food outlets.

"Greatly stimulated the sales of packaged ice cream"

Says PITTSBURGH MILK CO.

(and many others say so, too!)

PITTSBURGH CASE SALES CO.

Jordon Refrigerator Company
58th & Grays Avenue
Philadelphia 43, Penna.

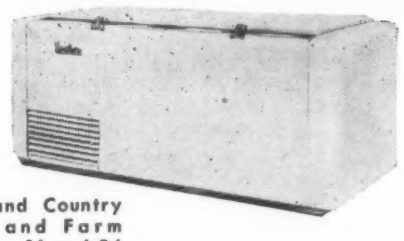
Gentlemen:

It gives us pleasure to pass on to you a compliment from Mr. Voorhees and other officials of the Pittsburgh Milk Company who state that the display facilities afforded by your glazed door freezer (Model M-24), have served to stimulate the sale of their ice cream in packages very considerably.

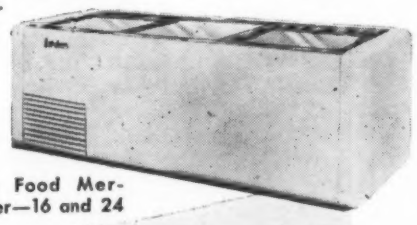
Much subsequent business has been obtained by us here due to the dependable work performed by this freezer. Several other ice cream companies, as well as frozen food companies, have swung to Jordon because of the able performance of this particular installation.

Yours truly,
PITTSBURGH CASE SALES COMPANY
W.R. Brown
W.R. Brown
General Manager

Ice Cream Selling is a PLUS QUALITY in This Modern JORDON Frozen Food Equipment!



Town and Country Home and Farm Freezers—16 and 24 ft. sizes.

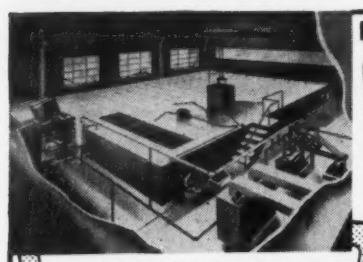


Frozen Food Merchandiser—16 and 24 ft. sizes.

Bulk and package ice cream sales are growing in a phenomenal fashion and credit in large measure is due to this better way of displaying the merchandise. JORDON was one of the pioneers in developing equipment suitable for this purpose—not only in design but with *improved and increased* refrigeration capacity. Coil area has been increased and the New JORDON "Free Air" Temperature Control, in all freezer models, now assures absolute cabinet temperature to match dial setting. The experience of PITTSBURGH MILK CO., with JORDON equipment has been duplicated all over the country by leading ice cream distributors and retail stores. These are facts, Mr. Dealer, that should help you sell more outlets and more JORDON equipment.

The JORDON *1948 Line Includes:*
REACH-INS IN A WIDE VARIETY • FROZEN FOOD MERCHANDISERS AND STORAGE CASES • FULL VISION CASES • WALL DISPLAY CASES • HOME AND FARM FREEZERS • BEVERAGE COOLERS AND ALL PURPOSE REFRIGERATORS • DISPLAY CASES
WRITE FOR 1948 CATALOG.

Jordon
AMERICA'S MODERN COMPLETE LINE
JORDON REFRIGERATOR CO.
Factory and Sales Division
58th ST. and GRAYS AVE., PHILADELPHIA 43, PA.
CABLE: "JORDONREF" BElgrade 6-4510
PLANT: PHILA., PA.



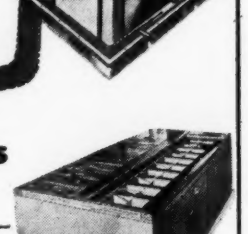
ICE MAKING AND REFRIGERATION EQUIPMENT

Pretab. Sectional Construction
FREEZE-COOLERS
• MEAT • PRODUCE
• DAIRY PRODUCTS
• ICE CREAM HARDENING AND STORAGE
• FOOD FREEZING
• INDUSTRIAL USES
Sizes from 195 to 4000 cu. ft. Flexible Arrangements

COMPLETE ICE PLANTS
ICE PLANT SUPPLIES, AMMONIA PRESSURE VESSELS, COLD STORAGE PLANT EQUIPMENT
• AIR AGITATION EQUIPMENT • BRINE COOLERS • RACEWAY COILS • TANK COVERS & FRAMING • BRINE AGITATORS
• CAN FILLERS • PURE GUM RUBBER TUBING • ICE TANKS • CAN DUMPERS • WATER FILTERS • GENERAL SUPPLIES

BULK ICE MAKERS
250-2000 LBS. CAPACITY
Electric, Gas or Diesel Engine Driven

INDUSTRIAL AND COMMERCIAL REFRIGERATION EQUIPMENT OF ALL TYPES
(Refrigeration Engineering Corp.)



RECO PRODUCTS DIVISION
2020 NAUDAIN STREET, PHILA. 46, PENNA

TOP MANAGEMENT EXECUTIVE WANTED

Minnesota manufacturer of major electrical household appliances has opening for top management executive. Only those with clean-cut, successful records will be considered. Send complete information, including education, experience, age, references, salary expected. Also furnish recent photograph with application. Confidential.

BOX 2749
AIR CONDITIONING & REFRIGERATION NEWS

Selling Automatic Washers Via Video Is Explained

CHICAGO — Just how washer demonstration-commercials are worked into a sponsored television show was explained in a recent statement by the Harry Alter Co., Launderall distributor.

This distributor, which recently sponsored the telecast of a local wrestling show, has formulated a regular system whereby the televised advertising message can be applied most effectively. The company statement follows:

"We have five spots to show and demonstrate the Launderall. An introductory announcement (about two minutes) before the camera is switched to the arena, two commercials (of two minutes each) between bouts, an eight-minute intermission period, and a short closing announcement.

"Our main commercial is during the intermission, when we put on a short skit about the use of the Launderall. At this intermission period, we also interview one of our dealers (a minute and a half) and devote two and a half minutes to an interview with a stage or screen star to hold the attention of the audience.

"We have televised the Launderall on three different nights. We announce our phone number several times during the broadcast and the results are gratifying. Locally, wrestling has the highest Hooper rating."

Growing out of the successful use of television by the Alter Co. a New York City Launderall distributor, M. Mitchell Gruhn, has contracted to demonstrate the washer by video over the "Missus Goes A-Shoppin'" program handled by CBS-TV.

Get Parsons Posts

Ford Fisher

James Gall

* * *

Two Detroit Departments Moved to Traverse City

TRAVERSE CITY, Mich. — Sales, advertising, and sales promotion departments for Parsons "Pureaire" kitchens have been shifted from Detroit to Traverse City and two key men have been promoted, it is announced by John A. Rishel Jr., Parsons sales manager.

"With production booming, it is more necessary than ever to coordinate and integrate the entire sales and advertising activities with design, engineering, service, production, and management. That's why we are bringing all activities under one roof," Rishel explained.

Promotions announced are James R. Gall, from advertising and sales promotion manager to district sales representative of eastern United States; and Ford Fisher, from purchasing agent to advertising and sales promotion manager.

Gall has served as advertising manager for Parsons since leaving the U. S. Army Air Force two years ago last summer.

As sales representative of Eastern U. S., Gall will be in charge of sales work in all or part of the following states or sections—New England, New York, New Jersey, Pennsylvania, Delaware, Virginia, Maryland, and the District of Columbia.

Except for his experience as director of purchases for Parsons Industries, Fisher's business record has dealt entirely with sales—four years of retailing selling, three years as salesman for the Doug Linder Tire Co. of Traverse City, then for a year selling oil equipment for Atha Supply Co., and finally for three years as salesman for the Firestone Tire & Rubber Co.

Bendix Ups Output 143%; '47 Dollar Sales Set Record

SOUTH BEND, Ind.—Bendix Home Appliances, Inc. in 1947 produced 601,946 automatic washers, 48,160 automatic dryers, and 46,943 automatic ironers, Judson S. Sayre, Bendix president, declared in his tenth annual statement to stockholders recently.

He noted that this was an increase of 143% over the total number of units manufactured in 1946.

Dollar sales for 1947 were the highest in the company's history. These sales, totalling $81,325,286, represented a gain of 164% over the $30,836,262 total in 1946, Sayre reported.

Net profit for the year, after Federal incomes taxes, was $10,552,728. This represented an increase of $7,373,948 over the 1946 net profit of $3,178,780 in 1946. Last year's net profit equalled $10.08 per share on 1,047,315 outstanding shares of common stock. In 1946, Bendix paid $3.04 a share on 1,043,990 common shares.

The company's balance sheet showed a substantially strengthened financial position with current assets amounting to 2.3 times current liabilities. Current assets totaled $16,198,379 and current liabilities $7,026,916. Working capital rose from $2,712,831 in 1946 to $9,171,463 in 1947.

Pointing out that Bendix sold 36,000 washers, dryers, and ironers to foreign customers last year, Sayre declared that "sales outlets, through distributors, have been established in important foreign centers and these will be increased to meet the demand for our products as restrictions are eased and exchange regulations permit."

He added, "We look forward to 1948 with optimism, ready to take advantage of the market possibilities and confident of maintaining our established position within the industry."

Gas Appliance Association Meets In N.Y. April 5-7

NEW YORK CITY — Major problems affecting producer and public alike are on the agenda of the annual three-day meeting of the Gas Appliance Manufacturers Association to be held April 5-7 in the Drake Hotel, Chicago, it has been announced here by John A. Robertshaw, president of the association. Robertshaw will deliver the keynote address at the opening general session.

Among the current matters to be discussed by the 500 manufacturer members are: production problems, 1948 advertising and sales promotion programs, the challenge of competition, new markets, distribution plans and techniques, population changes and relations with distributors, dealers, suppliers and government.

The various divisions of GAMA will hold afternoon meetings on Tuesday and Wednesday beginning at two o'clock at which time pertinent matters relating to their respective fields will be reviewed. Officers of these divisions will also be elected.

On Tuesday afternoon there will be sessions of the Hotel, Restaurant and Commercial Gas Equipment Division; Direct Heating Equipment Division; Industrial Gas Equipment Division; Gas Clothes Dryer Division; Controls and Related Accessories Division; Gas Valve Division; Gas Boiler Group; Gas Conversion Burner Group; "C-P" Manufacturers Group.

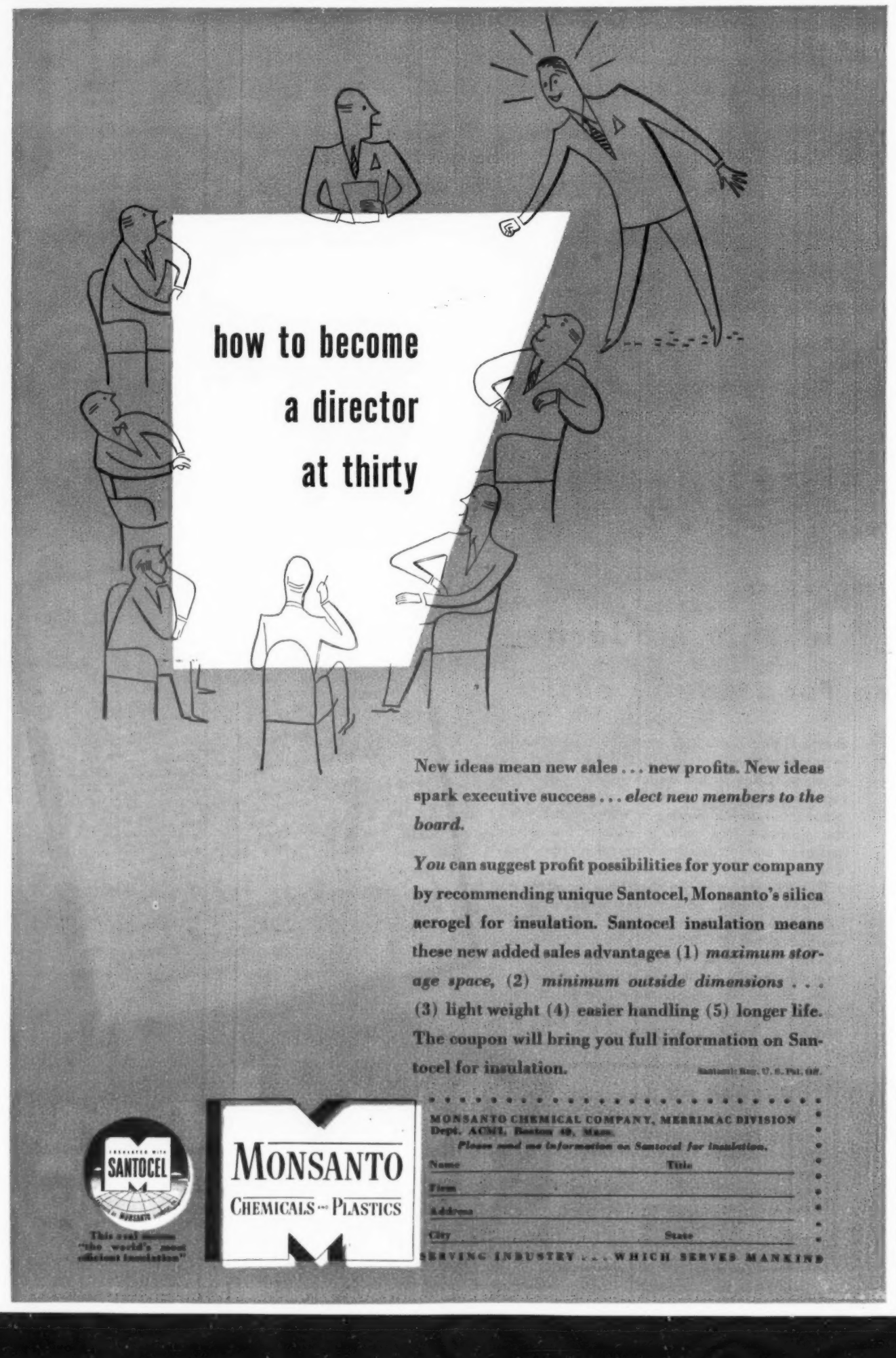
These divisions and groups will convene Wednesday afternoon at two o'clock; Domestic Gas Range Division; Gas House Heating and Air Conditioning Equipment Division; Gas Meter & Regulator Division; Gas Water Heater Division; Gas Air Conditioning Group; Gas Furnace Group.

G-E Distributor Honored By Dealers' Reception

NEW YORK CITY—Proof that retailers recognize and appreciate good distributor relations is evidenced in a testimonial dinner and reception planned for Earle Poorman, manager of General Electric Appliances, Inc., New York branch by the Westchester General Electric major appliance dealers, in cooperation with Metropolitan and Long Island dealers.

The dinner will be held April 8 at Contemporary club, White Plains, with H. L. Andrews, vice president of General Electric Co. as principal speaker.

"General Electric deserves concrete recognition for the fine contribution they have made to a healthier appliance industry," read the dealers' announcement. "Their sincere understanding of dealer's problems, the policies they have inaugurated to help us, we felt warranted an expression of appreciation from us. Thus, we planned this dinner for Earle Poorman, who symbolizes General Electric major appliances in this territory."



New ideas mean new sales . . . new profits. New ideas spark executive success . . . *elect new members to the board.*

You can suggest profit possibilities for your company by recommending unique Santocel, Monsanto's silica aerogel for insulation. Santocel insulation means these new added sales advantages (1) *maximum storage space,* (2) *minimum outside dimensions* . . . (3) light weight (4) easier handling (5) longer life. The coupon will bring you full information on Santocel for insulation.

Santocel: Reg. U. S. Pat. Off.

SANTOCEL — This seal means "the world's most efficient insulation"

MONSANTO CHEMICALS — PLASTICS

MONSANTO CHEMICAL COMPANY, MERRIMAC DIVISION
Dept. ACML, Boston 49, Mass.
Please send me information on Santocel for insulation.
Name _____ Title _____
Firm _____
Address _____
City _____ State _____
SERVING INDUSTRY . . . WHICH SERVES MANKIND

Compact, fully automatic, marvels of efficiency in sizes up to 7-tons.

TYPHOON AIR CONDITIONING CO., INC.
Division of Ice Air Conditioning Co., Inc.
794 UNION STREET • BROOKLYN, N. Y.

WILSON
REFRIGERATION, INC.
• FARM AND HOME FREEZERS
• REACH-IN REFRIGERATORS
• WALK-IN REFRIGERATORS
• FARM MILK COOLERS
DIVISION OF WILSON CABINET CO., INC.
SMYRNA, DELAWARE

Awaiting Carloads of Frozen Foods

Above is the largest of Frozen Food Distributors' two zero storage rooms. This one, combined with another utilizing six water defrost coils, is capable of holding 30 carloads of frozen food.

• • •

13 Water Defrost Coils Keep Zero Storage Rooms From Varying More Than 4° over One Year Period

OAKLAND, Calif. — Saving of space and maintenance of even temperatures in two large 0° F. rooms used for frozen food storage are features claimed for the installation of water defrost coils in the warehouse of Frozen Food Distributors, Inc., here.

The installation was made by James R. Payne, Santa Rosa refrigeration contractor, and consisted of 13 No. AS-2700-LT "Recold" water defrost coils, six in one room, seven in the other, all being connected to a 6 by 6 ammonia compressor with automatic controls.

Large enough to handle 30 carloads with a daily turnover of two cars, the frozen food wholesaling firm managed by Alvin Langfield has kept carefully charted temperature records since the installation was completed last spring.

Readings were taken twice daily (8 a.m. and 5 p.m.) from thermometers located close to the service doors through which the trucks are loaded.

These records show that in both rooms the majority of temperature readings were at 0° F. or slightly below. The maximum temperature reached was 6°, and this was noted but once in one room and twice in the second room, all of these occasions being in early August of last year.

Minimum temperature recorded in the two rooms was -9°, which was reached only once in the four-month survey period. Generally, the maximum fluctuation between high to low temperature totaled no more than 4°.

Stevens Is Larkin Sales Agent

ATLANTA—Appointment of Otis E. Stevens as sales representative in the Carolinas, southern Virginia, and eastern Tennessee has been announced by Larkin Coils Co.

Stevens will have his headquarters in Charlotte, N. C.

New Buffalo Firm Files Name

BUFFALO—A business name has been filed in the Erie County clerk's office for the Consolidated Engineering Refrigeration Co., 1152 Jefferson Ave., Buffalo, by Frederick W. Kroening.

Wisconsin Creamery Uses '3-Stage' Milk Cooling

DEPERE, Wis.—Three stages of cooling in a combined well water and indirect expansion refrigeration system are employed in the Fox River Valley Creamery Co. cooperative plant here to cool milk down to 38° F. after pasteurization.

This somewhat unusual system was installed by the Davis-Tursky Co. of Green Bay, Wis., and includes a York plate cooler or heat exchanger, 12 Dole plates, a 5-hp. water circulating pump, and a 10-hp. Schnacke condensing unit.

Milk, which is pasteurized as soon as the producers bring it to the dairy plant, is first cooled by well water down to 90° F. Then it goes through the two-stage York heat exchanger.

In the first stage 48° F. well water drops the temperature of the milk from 90° down to 52°. The milk temperature is then dropped to 38° in the second stage by means of 33° water supplied by the refrigeration system, the milk cooling capacity being 11,000 lb. of milk an hour.

The tank in which the water is cooled for the final cooling stage measures 10 ft. 6 in. long, 5 ft. 5 in. wide, and 43 in. high outside, and has 6 in. of mineral wool insulation.

Within this tank are 12 Dole plates, each of which is 42 in. by 120 in., which are supplied by six 30,000 B.t.u. Frigidaire valves. The plates are spaced 4 in. apart. Total water capacity of the tank is 1,760 gal., with a 2-in. thick ice bank built up on each side of the plates.

Water leaves this tank at 33° and returns at 38° F.

see your "DETROIT" WHOLESALER for Expansion Valves Solenoid Valves Controls

"DETROIT"

2810

DETROIT LUBRICATOR COMPANY General Offices: 5900 TRUMBULL AVENUE DETROIT 8, MICHIGAN

Division of: AMERICAN RADIATOR & Standard Sanitary CORPORATION

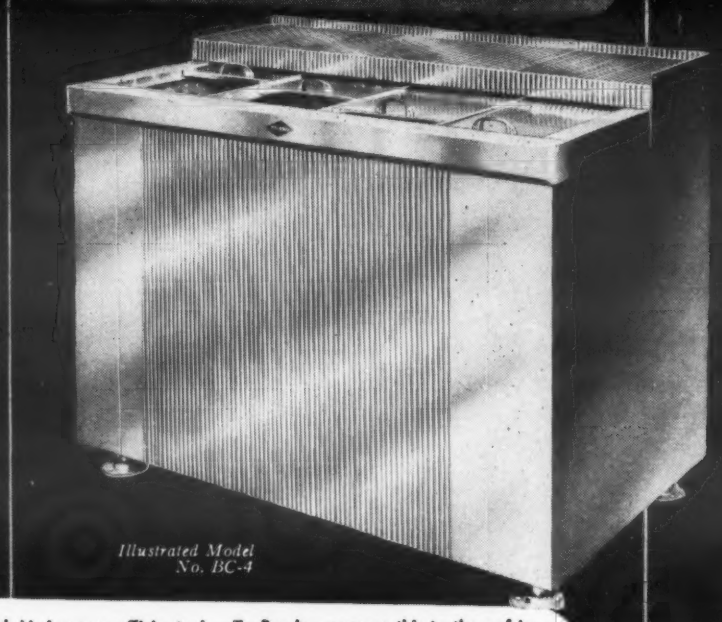
Canadian Representatives — RAILWAY AND ENGINEERING SPECIALTIES LIMITED, MONTREAL, TORONTO, WINNIPEG

"Detroit" Heating and Refrigeration Controls • Engine Safety Controls • Float Valves and Oil Burner Accessories

"Detroit" Expansion Valves and Refrigeration Accessories • Stationary and Locomotive Lubricators

EXPORT DEPARTMENT—Box 218, Ridgefield, New Jersey

TY-BRO BOTTLE COOLER has duct-controlled cold air



Illustrated Model No. BC-4

Directed Air is more efficient air—Ty-Bro has proven this to the refrigeration industry with its exclusive new principle of Duct-Control in this Bottle Cooler. Duct-Control directs the air to flow to all corners and sections of the cooler interior, at uniform rate and temperature. Storage racks within the box are arranged so that the flow of cold air is *directed* and *controlled* around the bottles, resulting in higher cooling efficiency.

TY-BRO sales policy of "highest quality at lowest price" is especially evident in this model. Write for descriptive literature and price lists.

- Stainless Steel Exterior*
- Corrugated Top for proper drainage
- Steel Lids for each compartment
- Adjustable Wire Dividers
- Rustproof Galvanized Metal Interior
- Adjustable Steel Legs
- Fibreglass Insulation
- Heavy-Duty Blower

*Stainless Steel throughout at slight additional cost.

TY-BRO

TYSON METAL PRODUCTS
6815 HAMILTON AVE. PITTSBURGH 8, PA.

LOOK FOR THIS NEW PACKAGE!

NOTE THE *NEW*, IMPROVED SEAL!

the important thing to know about refrigeration tube is

IT'S REVERE!

Every feature you want in copper refrigeration tube, you'll find in Revere Dryseal. This tube is dead soft, so that you can bend it easily—and the ends won't split when they're flared. The clean, bone-dry interior is permanently protected by a new double groove *mechanical* seal, compact enough to pass through any opening large enough for the tube itself. The new package protects the tube, keeps it bright and clean, and is readily identifiable in stock.

Whenever you buy refrigeration tube, look for the red and blue Revere Dryseal package. That's the way to be sure of fine quality—month in and month out—on every length you buy.

Revere Dryseal Tube comes in sizes from ⅛" to ¾" O.D., with standard wall thicknesses and is packed two 50-foot coils to a package. You can get prompt delivery on Revere Dryseal Copper Tube—or Revere Aluminum Refrigeration Tube—from leading distributors throughout the country.

Remember . . . be sure to ask for REVERE!

REVERE

COPPER AND BRASS INCORPORATED

Founded by Paul Revere in 1801

230 Park Avenue, New York 17, New York

Mills: Baltimore, Md.; Chicago, Ill.; Detroit, Mich.; New Bedford, Mass.; Rome, N.Y.—Sales Offices in Principal Cities, Distributors Everywhere.

'Business Is Wonderful' for Commercial Dealer Who Devises Top-Notch Promotion

By C. Dale Mericle

DETROIT—"Business is wonderful! We're making lots of sales, and we aren't chiseling on the price, either."

These statements may recall fond memories for numerous commercial refrigerator distributors who in recent months have been reluctant to talk about their sales activities.

However, the statements were not culled from a year-old interview. Both the words and the accompanying sweet music came just last week from a veteran commercial man here.

His name is Lee Hayes, and he heads up the Detroiter Refrigerator Mfg. Co., distributor of the Hussmann line and the recently added bakery fixtures of Columbus Show Case Co.

The success of Hayes and Detroiter is not accidental. Rather, it's the result of sound selling tactics and top-notch promotion programs—somewhat unusual promotion, in fact.

Just the other day, Hayes pulled off a promotion stunt that was unique in three respects:

1. He rearranged the cases in the Detroiter display room to make it a model supermarket (or "superette" as the smaller versions are called), complete with displays of perishables (imitation), dry groceries, and a check-out. Open self-serve cases were used almost exclusively.

2. He played host the evening the new display arrangement was completed to nearly 75 market operators and employes who are students in an evening class in Retail Food Distribution which F. F. Mauser introduced in February at Wayne university here.

3. After outlining the problems involved in planning store layouts, Hayes took the class through the new market display where he could point out the features of open cases generally and put in a few subtle plugs for his particular line.

Admittedly, inviting this class to meet at the Detroiter store was just a one-shot promotion stunt, but it was effective and will certainly do this distributor no harm.

The rearranged store display, however, will stay that way for some time, or at least until Hayes comes up with a different idea.

It serves to show prospects how the equipment may be arranged, or how the foods may be attractively placed in the cases. It also interests passersby on busy Woodward Ave., Detroit's main stem.

During a half-hour period 15 people stopped outside the show windows to look at the imitation fruit on display there and peer into the store layout itself. In addition, two youngsters cautiously came into the store to inquire:

"Mister, is that fruit real or imitation?"

It's things like that, incidentally, which probably cause Hayes to remark jokingly:

Detroiter Refrigerator's sales floor now serves as a model supermarket to show prospects how open self-serve cases can best meet their needs.

"If times ever get tough, we'll go into the grocery business right here."

In addition to equipment shown elsewhere on the floor, there are nine refrigerated cases and two unrefrigerated display sections in the superette layout.

Along the left-hand aisle, as one enters from the street, are a 10-ft. closed delicatessen case, a 7-ft. closed meat case, an 11-ft. open self-serve case for cold meats, and a 7-ft. open beverage case. All these contain dummy displays except for the beverage case, which is filled with bottles and cans of beer. Genuine, too.

At the very back of the store section is a 6-ft. multiple-deck open dairy case containing an attractive display of milk cartons and various types of cheeses. Adjoining this at a slight angle is the 7-ft. open frozen food case.

Along the right-hand wall heading towards the front comes first 18 ft. of bakery display counter with another 18-ft. of in-line back wall bakery display cases. These are not refrigerated.

In front on the right side is a 10-ft. refrigerated open fresh fruit and vegetable case with a matching 6-ft. section for unrefrigerated dry display.

Also an important part of the market layout are center aisle displays for canned goods, etc.; a stainless steel checkout with a red Formica top, and a weighing and packaging stand in the produce section. These latter items are produced by Detroiter in its own extensive wood and metal-working shops.

All the refrigerated equipment on display is, of course, Hussmann, while the bakery fixtures are of Columbus Show Case make.

This superette display should play an important role in Detroiter's promotion plans. Much of the firm's promotion comes from word-of-mouth advertising, but this is augmented by advertising in local trade papers circulating to the grocery trade.

And, to top this, Hayes has started a new advertising scheme which has aroused considerable interest among his prospects, he says. It's a bi-monthly four-page "newspaper" which he entitles *Self Serve News*, and it is sent out to 5,000 prospects.

Lithographed on a 11 by 15-in. page size, the "newspaper" carries articles and attractive pictures of market and other installations made by Detroiter throughout the city with self-serve type operations being stressed.

The name "Detroiter," is "played down" throughout the sheet. On the first page of the current issue, reproduced herewith, the firm's name doesn't appear until the third line from the bottom of the first column. In fact, "Detroiter" is mentioned only 14 times in the whole issue.

(Concluded on next page)

Prospects Learn What Their Competitors Are Doing

SELF SERVE NEWS

VOL. I, NO. 2 MARCH 15, 1948

Independent Operator's New Market is Ideal Example of Self-Serve Operation

MODERN LAYOUT PLAN, QUALITY EQUIPMENT, SETS PACE FOR OTHERS

Specially Designed Units Give Spacious Effect, Speed Traffic

ALL OVER THE UNITED STATES, independent food merchants are erecting new markets or modernizing present ones which are a far cry from the cluttered, crowded, slow-moving stores of old.

A typical example of the "new look" in self-serve markets is the handsome store recently opened by Mr. Walter C. Stahl at 10644 Morang, one of the East Side's most distinctive small markets.

From the glass-brick entrance to the back wall, every feature of this intelligently-conceived store contributes to customer comfort and attraction, and helps merchandise all types of foods profitably with a minimum of unnecessary activities.

STAHL'S MARKET

The New Stahl's Market at 10644 Morang, Detroit

SETS STANDARD FOR MODERN MARKETS

Issued by Detroiter every other month, this four-page newspaper shows 5,000 prospects in the Detroit area what their competitors are doing and how Detroiter can help them in planning modern self-serve markets.

Food Store Operators Get Facts on Open Cases

Lee Hayes, head of Detroiter, points out features of open cases to food store operators and employes in Wayne university's food retailing class which met at Detroiter's store recently.

Make your own ice cubes with . . .

United KUBEMASTER

★ 24 quick releasing trays hold 336 large cubes—3 complete freezings per day

★ Famous United disappearing lift door —slides away out of the way

★ 200 cube service bin, 3 garnish trays, space for bottle cooling

★ Steel and stainless steel construction

★ Rich brown high-baked Dulux finish

★ Fits under standard bar

DRY-KOOL BOTTLE COOLER

Famous stainless steel disappearing doors—dry, cold bottles in easy reach for fast service. Four sizes remote or self contained fit under any standard bar.

KOOLMASTER

Direct draw beverage dispenser for mechanical refrigeration. Chrome fittings, one piece sink with stainless steel splash board. 2 and 3 keg sizes remote or self contained.

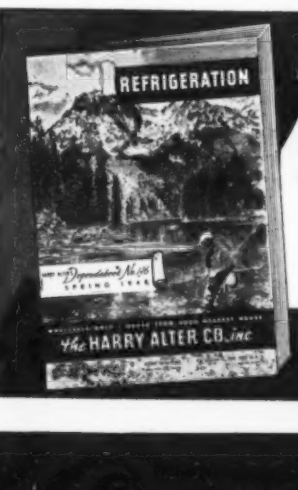
FOR THAT EXTRA COOLING SPACE —FOR A CONSTANT SUPPLY OF ICE

United's KUBEMASTER pays its way by cutting ice costs —gives a constant, easily accessible supply. And it gives needed *extra* bottle cooling space, keeping prepared drinks cold and ready to serve. Three handy trays for garnishes speed mixing and cut service time. All United beverage service units have perfectly round, die-cut corners for extra safety.

Some territories still open— write or phone

UNITED REFRIGERATOR COMPANY

350 ROBERT STREET · ST. PAUL 1, MINNESOTA



IT'S OUR GREATEST SPRING DEPENDABOOK NO. 146

AMERICA'S FINEST SOURCE FOR REFRIGERATION, AIR CONDITIONING and ELECTRIC MOTOR Parts and Supplies

Write for your copy today on your letterhead, please

THE HARRY ALTER COMPANY, INC.

1728 S. Michigan Ave., Chicago 16, Illinois

134 Lafayette Street, New York, 13, New York

5,000 Prospects Get Dealer's Newspaper

(Concluded from preceding page)

Hayes believes the new paper is being avidly read by his prospects, most of whom are independent market operators. These people are greatly interested in what their competitors are doing, but most of them never have time to shop the other stores, Hayes points out. This paper should give them a good picture of what other market operators are doing and also, naturally, an idea of the services available from Detroiter.

Six issues of this promotion piece will be put out a year. First copies of a new issue are sent out to 2,500 prospects on Detroit's east side, and the next month another 2,500 of the same issue go to west side prospects. Every two months a new issue is prepared.

The actual preparation of the paper is handled by an advertising agency. Hayes outlines roughly the contents and ideas for copy to an agency man who then prepares the complete issue for Hayes's approval. The mailing is handled by an outside firm, also.

The whole operation for a year, which will include 30,000 copies going to 5,000 prospects, will run $4,500, according to Hayes. This figures out to 15 cents a copy, which Hayes thinks is pretty cheap for promotion as effective as this.

Chief of the services to prospects which all Detroiter promotion stresses is its store-planning counsel, a field in which Hayes specializes, backed up by many years experience not only in store planning but in specialty selling. It was the highspots in store planning which Hayes touched upon in his talk before the Wayne University Retail Food Distribution class when it met at the Detroiter store.

ALTERATIONS EXPENSIVE

"The small store operator," he told the group, "often leases a store building and then tries to handle all the alterations himself. He may not realize it, but plumbing costs are terrific now. And the electrical supply may be inadequate so that additions or changes are needed. Today, the size of the electrical rewiring bill may kill you.

"These conditions may occur in a new building as well as old structures.

"Or," continued Hayes, "the market operator may have enough money to have his own building put up, but the average building contractor will usually put the plumbing connections and electrical outlets where they're not needed, and omit them at spots where they're essential.

"So, it is wise for the store operator to first consult a good equipment man who knows his business, for he can help the store operator greatly.

"Today your market building must be designed to fit your needs. Rather than fit your merchandising plans into a building, first design your merchandising layout and then erect your building around it. In so doing, you'll have plumbing outlets and drains, and electrical outlets, just where you need them, and this will keep these costs at a minimum."

As for the actual layout of equipment and departments in a store, Hayes, who has probably made more store layouts than any other individual, emphasized to store operators that a store layout expert "can do only 20% of your thinking. The market operator has to do the other 80% himself."

Fundamentally, he said, the general thinking on store layout is all about the same.

"One theory is to put the produce section at the end of the shopping tour in the store. The housewife usually builds her menu around meat, which she buys first, and so she prefers to buy vegetables last.

"However, the opposite arrangement also works," he said in pointing out that there probably are as many theories on store layout as there are layout experts.

DISPLAY IS MAIN PROBLEM

"The main problem, though, is proper display. In any store of 10,000 to 12,000 sq. ft., which is the size of your average independent market, with a single floor, you can't lose the produce department no matter where you put it.

"What you should do is give as much space as possible to your most profitable items. Be sure to have proper space for your perishable foods, for this is where you make your money," Hayes told the store operators.

The selling area devoted to perishables, including meats, dairy items, fruits, and vegetables, should run from 20% to 30% as a minimum, he suggested.

Wholesalers of dry groceries, he told the class, are now urging independent market operators to sell the dry groceries and canned goods at cost or nearly so, and make their store profits in the perishable line.

Customers will be attracted to the independent's store by these low prices, while the operator makes his profits on perishables, which are a day-to-day proposition for the big chain just as for himself. And the smart independent can make perishables pay off.

After his talk and before Prof. Mauser took over the class, Hayes took the "students" through his "superette" to point out features of the various pieces of equipment and answer questions, such as:

"These open, self-serve cases may be good merchandisers, but don't they cost more to operate than the old-style case?"

"I'm glad you asked that question," Hayes replied. "Anyone who tries to tell you that an open self-serve case won't cost any more to operate than a closed case which is fully insulated all the way around is not giving you the correct answer.

"Yes, an open case does cost more to operate, but don't forget that it likewise will increase your sales greatly so that your profit will be much more than the added operating cost.

"For example, with open dairy cases, sales of milk have increased as much as 400 or 500% over conventional methods. Milk is a staple, not generally considered as an 'impulse' item, but these sales increases with open cases have been noted every time one was installed. No one understands why, but there it is."

When Prof. Mauser took over the class for the remaining period, he, too, commented on the advantages offered by open cases.

"Self-service merchandise cases tend to push the merchandise right into the customer's hands," he declared, and speaking of the great advances made in the refrigeration field, he added:

"Seven years ago if anyone had said that frozen foods could be sold from an open case, bystanders would have called the paddy wagon."

Despite his many years of experience in store planning and merchandising, Hayes is an ardent supporter and student in this new class in Retail Food Distribution, which was introduced at Wayne university by Mauser, assistant professor of marketing and for several years a marketing research executive for one of the largest chain grocery organizations.

Dealer Plays Host to University Food Retailing Class

Prof. F. F. Mauser of Wayne university augments Lee Hayes' remarks on store planning for the food retailing class at the Detroiter session.

If It's Right For the U. S. Navy...

IT'S JUST RIGHT FOR ME!

The Koch 25-Cu. Ft. Reach-In Refrigerator is now available with or without an ice-maker. You can freeze a full load of 216 cubes (21 pounds of ice) in a remarkably short time...real convenience!

"I'm talking about the Koch 25-Cu. Ft. Stainless Steel Reach-In Refrigerator. Koch pioneered this design to meet battle conditions aboard ships during the war, but I've got just as many problems as Uncle Sam's Navy.

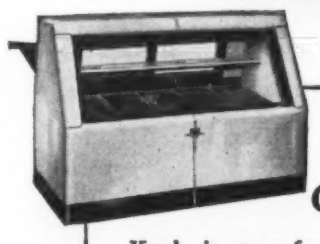
"I need an *efficient* refrigerator—and this new Koch Reach-In fills the bill. It's 100% effective. Because there's no wood used in its construction, insulation is continuous—even across the flanges of the doors. No cold gets away. It costs less to operate.

"I need more usable refrigerator space in less floor space. And the Koch Reach-In scores again. It's big! 25 cubic feet of refrigerator space in only nine square feet of floor space. Imagine!

"And how that beautiful stainless steel cabinet dresses up my kitchen. It would pass a Navy inspection any time!"

Yes, the Koch 25-Cu. Ft. Reach-In Refrigerator, made of stainless steel welded into one unit, effectively solves your refrigeration problems if you want to store more foods at lower cost. It is now available on the civilian market.

"KOCH IS TOP NOTCH"



Once Again...

Koch is manufacturing the popular 6-ft. long double duty display case. It's a companion to current 10 and 12-ft. models. Shipments to Koch distributors and dealers begin this month.

KOCH Refrigerators

NORTH KANSAS CITY 16, MISSOURI SINCE 1883

They'll Do It Every Time . . . . By Jimmy Hatlo

WHAT A SWELL TEN DAYS THIS IS GONNA BE WITH OLD EGGHEAD AT THE CONVENTION! LOOKA THIS PITCHER I DREW.. DON'T IT LOOK LIKE THE OLD SO-AND-SO..?
OH! OH! LOOK WHO DIDN'T GO AWAY AFTER ALL...
I'M GOING TO ENJOY THIS. LAUGHIN' LENA HASN'T DONE A TAP OF TOIL SINCE J.B. LEFT YESTERDAY
SOMEBODY'S GOING AWAY, BUT IT WON'T BE BIGDOME! LENA WILL BE A HOME GIRL AS OF NOW...
SOMETHING SLIPPED UP, AN' MAYBE THERE'LL BE SOME SURPRISE SLIPS IN THEIR ENVELOPES.
BULLETIN BOARD
GOODBYE FOREVER WE HOPE
JIMMY HATLO
2-24
J.B. BIGDOME
WHEN THE CAT'S AWAY HE OUGHT TO STAY..
THANX! AND A TIP OF THE HATLO HAT TO ORMOND V. GOULD, LAND'S END, FT. LAUDERDALE FLA.
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Do You Have 'One Foot In the Door'?

AIR-CONDITIONERS . . . Governair Air Handling Units are especially designed to meet the requirements for process work or comfort. Compact and quiet, they can be completely equipped for year-round air-conditioning. Wide range of sizes in both horizontal and vertical types.

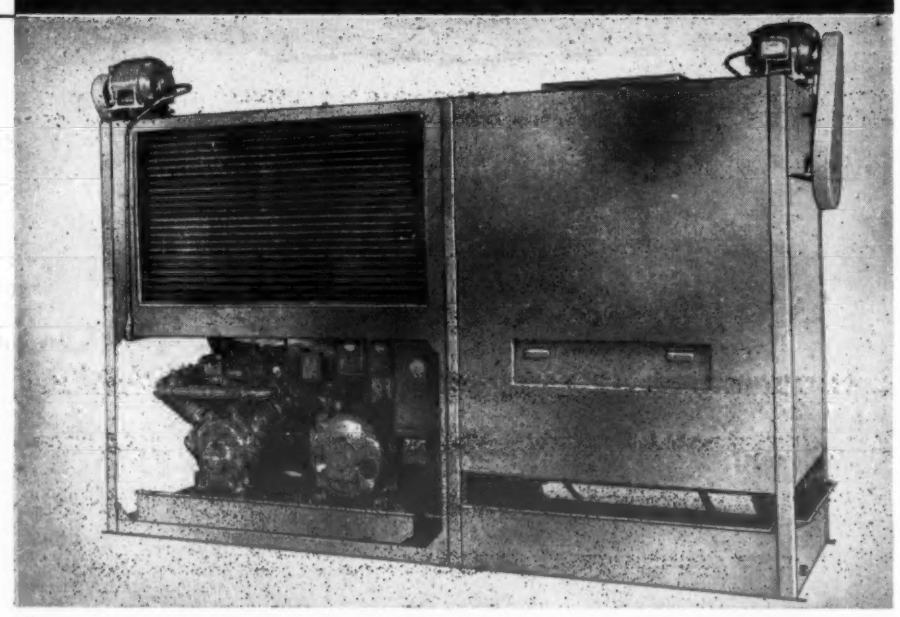
Again it's

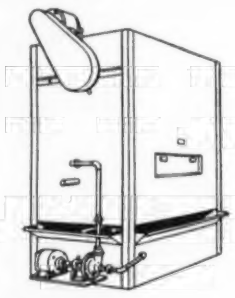
GOVERNAIR

completely packaged air-conditioner

with evaporative condenser

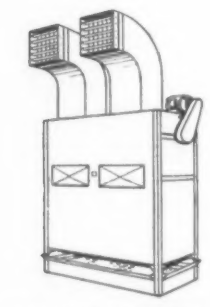
(U. S. Patent No. 2,297,928)





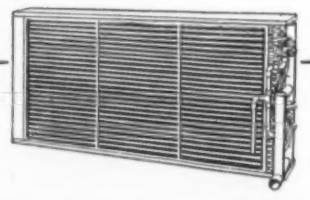
EVAPORATIVE CONDENSERS . . . An economical means for the condensing of refrigerant gases, Freon, Methyl-Chloride or ammonia. This one unit replaces remote water wasting cooling towers, excess piping and water lifting pumps. Water consumption is reduced to a fraction of that required by water cooled condensers where water is wasted.

- Ready to operate
- Make only simple electrical, water and duct connections
- Wide range of sizes (3 tons to 50 tons)
- Rapid delivery



FLOOR TYPE UNIT COOLERS . . . Designed for use in cold storage rooms to produce any temperature required. Water defrosting apparatus may be furnished for units used in rooms with temperatures below 33 degrees. Air ducts and diffusers shown are furnished on special order.

Here is the *only* really complete packaged air-conditioner on the market offering compact, efficient operation, easy installation and high quality performance. Its outstanding feature, of course, is the built-in Evaporative Condenser which reduces water consumption and cuts water costs to a fraction. Higher cooling output per horsepower input is obtained by careful balance between the three component parts. Sound engineering, modern assembly and quantity production methods make Governair *the greatest value known* in modern air-conditioning equipment.



BLAST COILS FOR HEATING AND COOLING . . . Made of copper tubes and copper fins spaced according to temperatures involved. All joints are securely welded into suction headers on the return side and fed counter-flow from the expansion valves. This assures a tight system with minimum loss of refrigerant. Thorough pressure test made at factory.

WRITE OR WIRE FOR DESCRIPTIVE LITERATURE AND PRICES

GOVERNAIR

GOVERNAIR CORPORATION—513 N. BLACKWELDER—OKLAHOMA CITY, OKLA.

PIONEERS IN THE MANUFACTURE OF COMPLETELY PACKAGED AIR-CONDITIONERS

AN INTERNATIONAL INSTITUTION • SUBSCRIBERS ALL OVER THE WORLD

Trade Mark registered U. S. Patent Office: Est. 1926

AIR CONDITIONING AND REFRIGERATION News

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VOLUME 53, NO. 13, SERIAL NO. 993, MARCH 29, 1948

Excellent Idea for Appliance Dealers: Adopt a Family

So many new appliance dealers have been appointed recently in certain areas and districts by volume-happy distributors and manufacturers that some of the proved-successful dealers who have long dominated those sectors are worrying about what they can do to maintain their positions of leadership.

Some of them are writing us questioning, almost frantic letters about this problem.

Best advice we can give them is this:

Personalize your service. *Identify* your merchandising program with the needs of *individual families.*

Everybody concedes that during the forepart of 1948—and possibly longer—buyers may continue to place orders for products they want and need.

After that? Well, the family which has bought a new range, some furniture, and a coat of paint on the outside of the house, may steal a look at its bank balance. And then said family could decide that no new purchases are in order for awhile.

Where does that leave you?

Out on a limb, brother!

You are just about ready to make your play for business with the new television sets, for example. Or, those attractive, high-output air conditioners have just arrived.

Electric blankets, walkie-talkie home communicators, electronic furniture dusters, home freezers, and so forth and so on, are now crowding your floorspace.

At this point, you must *sell,* good friend.

Concentrate on snagging the goodwill of a small number of progressive families.

Treat them like brothers—give them first choice at scarce products—and then follow up these installations of demand items in a friendly fashion. This personal attention and follow-up call will give you an opportunity to talk about your exciting *new* products.

Personalize your service.

Sell on a John-and-Joe basis.

Adopt several promising families. Take their troubles (and all families have them!) unto your bosom.

Follow through on their needs. Interject yourself into the picture when you can help them become happier by providing them with time-saving, wife-saving modern appliances.

Get so close to them and their problems that you are considered "one of the family."

Then the sale of one appliance will lead to a second, third, and fourth.

That's *chain-selling.*

And *personal* chain-selling will win out every time over chain-store merchandising.

What's more, *personal service* (on a you-know-me-and-I-know-you basis) will put the hard-working specialty dealer into the King's Row of the specialty appliance chess game.

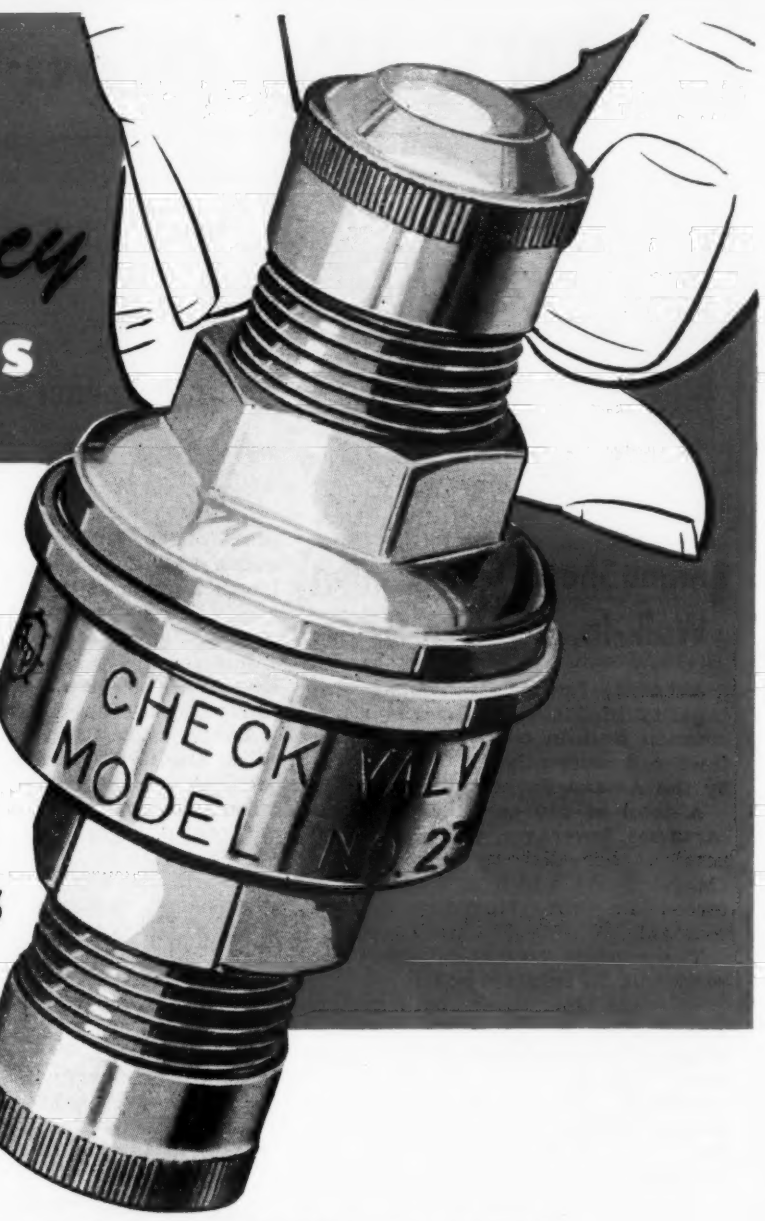
Adopt a family. Live with them. And *serve* these newly-made friends!

As a matter of fact, you and your co-workers can adopt several families. When you've become permanent friends with these families, competition needn't worry you.

No upstart can wean away these "adopted" families from the conscientious, hard-working appliance dealer.

Simplify Your Service... Improve System Efficiency

WITH A-P DEPENDABLE REFRIGERATION VALVES



NEW

FOR MULTIPLE TEMPERATURE SYSTEMS

A-P MODEL 234 REFRIGERANT CHECK VALVE

• The new A-P Model 234 Refrigerant Check Valve is an effective companion to the popular A-P Model 235-S Suction Pressure Valve — where two or more evaporators must operate at differing temperatures with one condensing unit. The new Check Valve is installed in the outlet line of the lower-temperature evaporator to prevent the back flow of gas from high to low temperature evaporator during the off cycle.

Several new design and construction features make the new A-P Model 234 particularly valuable for service engineers. It can be installed in any position in the line. Self-aligning stainless steel valve discs are individually ground and lap-fitted to the seat for a perfect and positive closure. With its precision built forged brass body, accurately machined bronze seat and minimum number of internal parts, it assures a long life of trouble-free service. May be used for Freon, Methyl or Sulphur. Ask your Wholesaler about the new A-P Model 234 Refrigerant Check Valve, or write for bulletin No. M-200, or new condensed catalog.

INDISPENSABLE . . . FOR MULTIPLE SYSTEMS

A-P DEPENDABLE Model 235-S SUCTION PRESSURE REGULATING VALVE

A-P Model 235-S is well-known for its ability to provide faster, closer, more accurate control of evaporator pressures on multiple systems. Maintains constant pressure regardless of load change. Can be adjusted to system immediately, with adjusting knob and graduated visible scale on collar. No waiting for system to settle down. Capacity, up to ½-ton Freon, ¾-ton Methyl or Sulphur. Pressure adjustment from 0" vacuum to 40 lbs. At your wholesaler — or write for bulletin M-110, or new condensed catalog.

AUTOMATIC PRODUCTS COMPANY

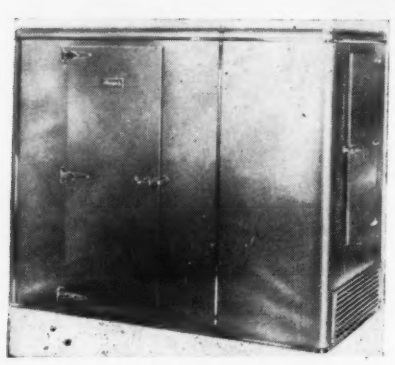
2450 North Thirty-Second Street
MILWAUKEE 10, WISCONSIN
Export Department, 13 East 40th Street, New York 16, N. Y.

A-P DEPENDABLE REFRIGERATION VALVES

STOCKED AND SOLD BY GOOD REFRIGERATION WHOLESALERS EVERYWHERE . . . RECOMMENDED AND INSTALLED BY LEADING REFRIGERATION SERVICE ENGINEERS

R-302

What's New



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Amana Shows Combination Walk-In, Reach-In Model

AMANA, Iowa—With an over-all capacity of 135 cu. ft. a new combination walk-in cooler and reach-in freezer is currently being promoted by the Amana Society.

A total of 110 cu. ft. for storing carcasses, beverages, and dairy products is provided by the walk-in (Model 200S) which is cooled by a forced air unit. Humidity is kept constant.

The reach-in freezer furnishes the remaining 25 cu. ft. of space.

Stainless steel covers both the inside and out of the Amana freezer-cooler, which is sealed against moisture seepage. All hardware is chromium. Dimensions of the unit are as follows: 96 in. wide x 48 in. deep x 80 in. high. Model 200S can be shipped in sections and assembled on the spot.

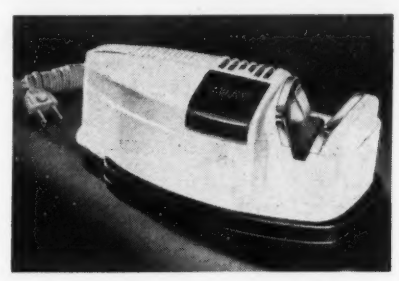
Each section of the freezer-cooler is refrigerated by a separate ½-hp. sealed unit. Horizontal heavy-duty contact freezer plate shelves line the reach-in.

Knife Sharpener Comes Out As Cory Corp. Product

CHICAGO—Cory Corp., manufacturer of Cory glass coffee brewers and Fresh'nd-Aire electric air circulators and humidifiers here, has recently purchased all tools, dies, and complete manufacturing and sales rights for the domestic electric knife sharpener developed by the G.M. Laboratories, also of Chicago.

To be known as the Cory Model DKS, the new unit operates on the principle of an abrasive sharpening wheel, directly driven by an electric fan cooled motor. Use of the sharpener requires no special skill, according to the manufacturer, as the angle of grinding and speed of the wheel are not left up to the operator. Metal clips hold the knife against the wheel at the proper angle and if too much pressure is applied by the operator, the wheel stops.

It is claimed that any type of cutlery may be serviced with the new appliance—even curved-edged grapefruit knives. A speed of 3,500 r.p.m. is said to furnish the perfect grinding speed. Switch is a pressure panel control, which prevents the possibility of leaving the unit running when not in use.



Cory sharpener, Model DKS

Streamlined and modern in appearance, the housing for the appliance consists of a heavy die casting with a white enamel finish. Fingertip switch and rubber safety tread on the base are black.

The unit has 60 cycle motor for use on 110 volt a.c. and will not interfere with radio reception, Cory points out. A 6-ft. cord, which is stored in the base of the sharpener, is included with the unit. Retail price is given as $11.95, no Federal tax.

* * *

Advance Mfg. Truck Unit Defrosts Automatically

DETROIT — Light weight, automatic defrosting, automatic changeover from the cooling to heating operations, and ease of installation are among the features claimed for the new line of truck refrigeration units which Advance Mfg. Co. here is introducing to the trade.

The units will be sold on the open market through appointed dealers, this being a departure from Advance's previous exclusive distribution arrangement with a single trailer manufacturer, the company announces.

Known as the "Little Giant," the new unit is a self-contained model built in two sections. One section contains the cooling coil and fan and is mounted on the inside front wall of the truck or trailer body. The second section houses the compressor, gasoline engine, condenser coil. fan, and controls. This is mounted on the outside front wall above the cab.

After mounting, the two sections are connected by means of self-sealing couplings on flexible refrigerant lines.

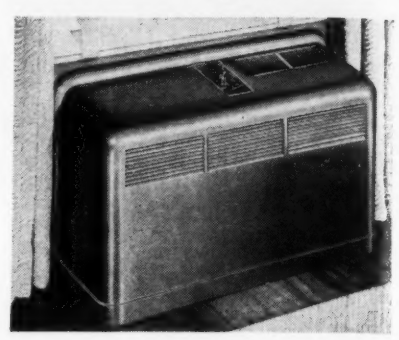
Year-round service is claimed for these units as they can cool in the summer and keep loads from freezing in winter. For cooling applications they are recommended by Advance for hauling only pre-cooled loads. Automatic defrosting is a feature on all three models in the new line.

Model LGL, which uses a six-cylinder 5-hp. compressor, is designed exclusively for holding temperatures of 0° F. to 30° F. in trucks or trailers from 20 to 32 ft. in length which have 6 in. of insulation. Control of the unit is by a heating-cooling thermostatic switch, and total weight of the whole unit, less batteries, is 733 lbs. Cooling capacity is given by Advance as 14,000 B.t.u. per hour at -15° evaporator.

Model LGH, fitted with a 3-hp. compressor, is intended for holding temperatures above 30° F. in trailers or trucks 20 to 32 ft. long which have 3 in. of insulation. Heating feature is standard equipment on this model as on the first one. Weight, less batteries, is 683 lbs., and the cooling capacity is said to be 18,000 B.t.u. per hour at 20° evaporator.

Model LG can be used in any size truck or trailer up to 20 ft. in length for maintaining temperatures above 30° F. with 3 in. of insulation, or temperatures in the 0° to 30° F. range if the truck body has 6 in. of insulation. The heating feature is not standard on this model, but will be available at an extra cost. This model has a 3-hp. compressor, weighs 621 lbs. less batteries, and is rated at 14,000 B.t.u. capacity per hour at 20° evaporator.

New Window Conditioner Introduced by Mitchell



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CHICAGO—A ½-ton window model air conditioner known as Model M-10 has been introduced by Mitchell Mfg. Co. for use in home and private offices, the company announces.

Powered by a hermetic condensing unit, the air conditioner cools, dehumidifies, circulates, ventilates, and filters air, it is stated. Tests by an independent laboratory have determined the unit's capacity as 5,780 B.t.u. per hour with an outside ambient temperature of 90° F. and entering air of 79.6° dry bulb and 66° wet bulb.

Room side of the conditioner has a smooth finish and is fitted with two control knobs on the top panel.

Under the test conditions supplied above, the unit delivered 152.8 c.f.m. The net room dehumidifying effect was 2,660 B.t.u. per hour, and the sensible cooling effect was 3,120 B.t.u. per hour. Total power input was 816 watts. Over-all performance factor was 7.08 B.t.u. per watt.

Hussmann Reach-Ins Have Optional Coil Setups

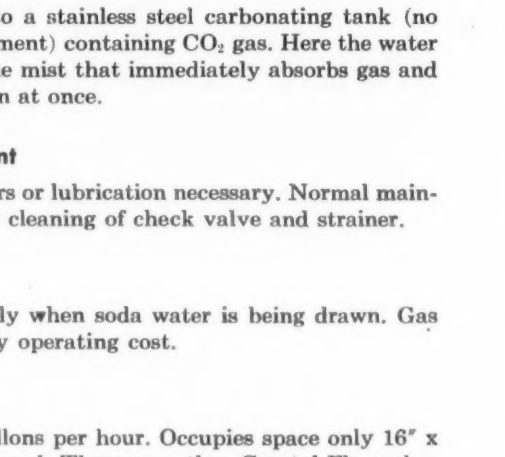
* * *

ST. LOUIS—Hussmann Refrigeration, Inc. here has added three new sizes of self-contained reach-in refrigerators to its line. Capacities are 16, 25, and 35 cu. ft.

All of the models, except the 16-ft. box, have optional coiling—either Hussmann's M'Ocean air coiling or spacious ice maker and freezer coil. The 16-ft. model has only the ice maker and freezer coil.

Exterior finish is Dulux white enamel; interior is porcelain.

The CRYSTAL-FLO "LB" Carbonator
Assures Highest Quality Soda at Lowest Cost



Small in size, highly efficient, low in price, the Crystal-Flo Model "LB" Carbonator offers all users one of the greatest values in the carbonator field.

It Provides:

Top Quality Soda — Finer Carbonation

Water is pumped into a stainless steel carbonating tank (no lining to need replacement) containing CO_2 gas. Here the water is separated into a fine mist that immediately absorbs gas and gives high carbonation at once.

Exceptionally Convenient

No belts, pulleys, gears or lubrication necessary. Normal maintenance includes only cleaning of check valve and strainer.

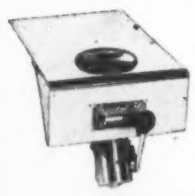
Low in Cost

Water pump runs only when soda water is being drawn. Gas is practically the only operating cost.

Capacity and Size

Capacity 20 to 25 gallons per hour. Occupies space only 16″ x 20″ x 12″. Filter optional. There are other Crystal-Flo carbonators in larger capacities for all uses.

CRYSTAL-FLO
the original UNDER-BAR DISPENSER



Now new and improved, the Crystal-Flo Dispenser eliminates cost, trouble and space needed to handle full or empty bottles for soft drinks. Saves top counter or bar space, too. Mixes better drinks in continuous flow. For all soft drinks and mixed beverages.

DISTRIBUTORS

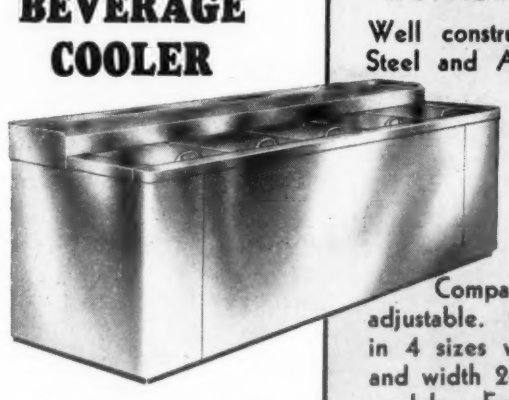
Here's your opportunity to increase your sales and profits with a line of the finest precision built and engineered units on the market. The Crystal-Flo System is ideal for the rich fountain and tavern market. Write for information.

AMP CORPORATION
2900 Locust Street • St. Louis 3, Missouri
43

Enjoy the Economy of Quality with

BEVERAGE-AIR

BEVERAGE COOLER



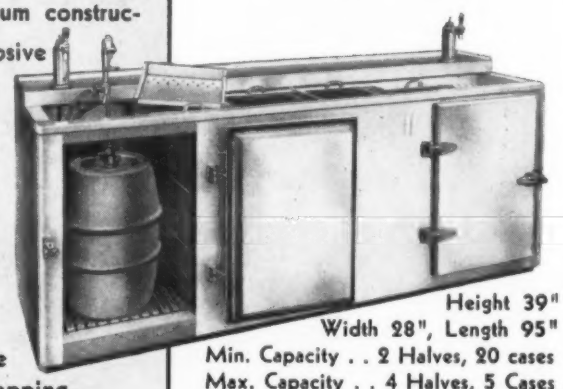
Self-Contained or Remote Model B-78-7

IT'S NON-CORROSIVE!
Well constructed of Stainless Steel and Aluminum, heavily insulated, this cooler affords you more capacity in less space than any other cooler.

Compartment dividers are adjustable. Cooler is available in 4 sizes with height 33⅛" and width 26" standard on all models. Front, top and ends are Stainless Steel.

IT'S VERSATILE!
Another "First" in Stainless Steel and Aluminum construction. A non-corrosive Bar with adjustable compartment dividers . . . heavily insulated . . . removable drain pans and lids to facilitate keg handling and tapping.
Stainless Steel Front, Top, Ends.

BEVERAGE-AIR
CLUB-BAR



Height 39"
Width 28", Length 95"
Min. Capacity . . 2 Halves, 20 cases
Max. Capacity . . 4 Halves, 5 Cases
(Optional) The Club-Bar is available with black "cigarette-proof" Micarta Top to make it a complete serving unit.

MANUFACTURED BY THE
PUNXSUTAWNEY COMPANY
Punxsutawney Pennsylvania
Dealers and Distributors: Write for our distribution policy on these units.

sell the cabinet that's designed to sell MORE FROZEN FOODS

The GOODSELL MODEL SS8 FROZEN FOOD DISPLAYER
is designed to meet the needs of the independent food merchant.

HERE'S PROOF:

1. REFRIGERATED DISPLAY WINDOW for display of opened up packages. Attracts attention. Stimulates impulse buying.
2. SELF CONTAINED ½ H.P. CONDENSING UNIT mounted beside display window, does not take up floor space.
3. SLIDING GLASS LIDS, which may be removed during busy hours. Greater accessibility to food.
4. Goodsell OVERHEAD COILING avoids rapid softening of the top layer of food.
5. LOW OPERATING and MAINTENANCE COST.
6. 21 CU. FT. CAPACITY—holds 700 average packages of food.
7. CABINET ONLY 68" LONG . . . requires very small floor area

Write for descriptive folder

GOODSELL CORPORATION
1820 FLUSHING AVE., BROOKLYN 6, N.Y.
Evergreen 7-4064

What's New (Con't)

'Ice Cream O'Mat' Can Stimulate Impulse Sales

OAKLAND, Calif.—Push-button ice cream sales are in prospect for purchasers of a new dispenser put out by Frosted Food O'Mat, Inc. The unit, which permits a six-flavor choice of ice cream, is available in standard or coin-operated models, the manufacturer said.

By making this part of shopping easier, the "Ice Cream O'Mat" will ultimately cut down traffic congestion in groceries, supermarkets, department stores, and drug stores, it was pointed out.

Individual buttons for each of six different flavors are located side by side on the dispenser, thus permitting simultaneous selection by a number of patrons. All the customer need do is press the button and a package of ice cream emerges without the necessity of opening or tilting a door. The ease with which Ice Cream O'Mat can be operated will stimulate many impulse sales, company officials predict.

Besides avoiding the necessity for the customer to grope blindly in the cold lower sections of an ordinary storage cabinet, this self-serve unit has many advantages for the store owner.

For one, the high porcelain back allows ample space for advertising banners as well as flavor identification strips. In addition, it loads through the top so that the first package inserted is the first one sold. Turn-over is complete, for no packages are "buried" at the bottom of the stack.

To compensate for the below-zero temperature maintained throughout, the Ice Cream O'Mat has an automatic defroster. Cost for operating the electrically-controlled dispensing mechanism is reported to be but one cent per 3,000 packages.

Design of the cabinet closely follows customer "easy shopping" requirements as outlined in several surveys over a period of years, the company disclosed.

Typhoon Designs Smaller, Compact Packaged Models

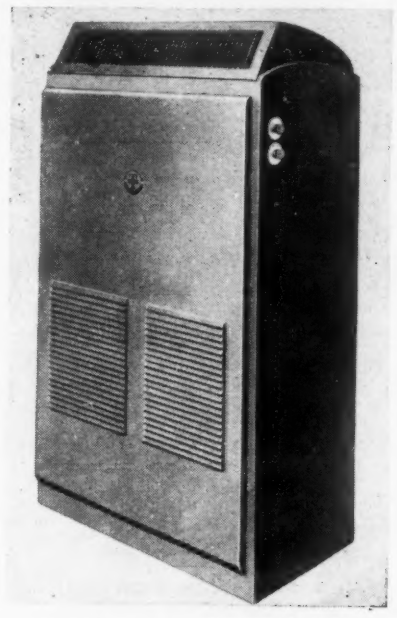
BROOKLYN — Development of a line of new 1½, 2, and 3-ton packaged air conditioners has been announced by James F. Daily, president of the Typhoon Air Conditioning Co., Inc. here.

Taking their place alongside the larger Typhoon units which are made in 3, 5, and 7-ton sizes, the new console units are already being distributed by the firm's dealers.

Featuring several refinements in design, the new Typhoon packaged model design has a new split-pan condensate removal system that makes it possible to incorporate in a small area the over-sized components found in other Typhoon units.

The condensate removal pans serve a double purpose by creating an even flow of air through the cooling coil. The condensers are all copper with exterior return bends.

Water cooled, it can often be used in situations where air-cooled units are not practical. Flexible copper tubing makes possible easy, economical water connections. Large, slow-turning compressors give high output per horsepower with low noise level. Insulation insures quiet operation.



Typhoon console model air conditioner

Disposal Unit Absorbs Steady Feeding of Waste

OAKLAND, Calif. — Kaiser Fleetwings Corp. here has recently started distribution of its new garbage disposal unit to its distributors and dealers on an allocations basis.

Outstanding feature claimed for the new product is its continuous flow principle, which allows the operator to feed any amount of waste into the unit without frequent stopping and starting of the motor.

Cold water is used to flush away the waste and the appliance is said to be self-cleaning. Replacement of the closure is not necessary before starting the motor.

All cutting and shredding parts are of high-grade alloy steel. Housing is of aluminum alloy, according to the company.

The device fits any sink with a 3½ or 4-in. drain opening, and with most sinks no lowering of the drain outlet is necessary for installation of the unit.

Suggested retail price is $109.50, plus installation charge.

Healthmaster Steam Bath Plugs In Standard Outlet

HOLLYWOOD, Calif.—A portable, collapsible, electrically operated steam bath has recently been introduced by the Healthmaster Steamette Co. here. Known as the Healthmaster Steamette, the cabinet is recommended for both home as well as professional use.

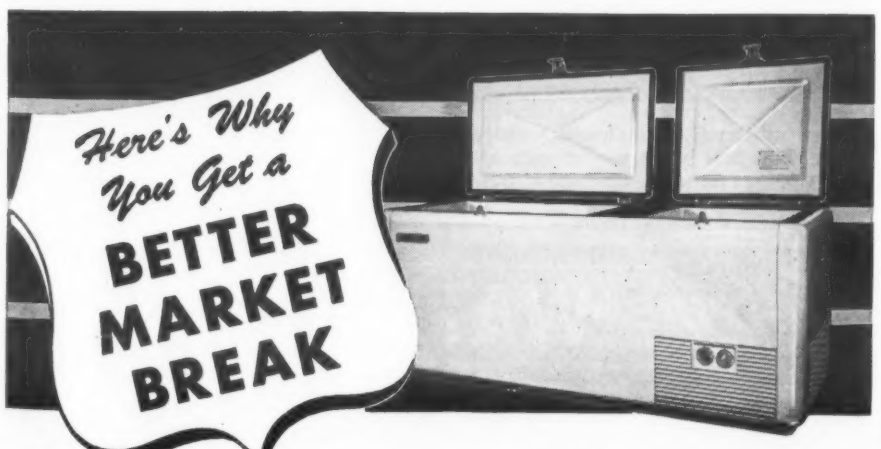
Requiring no plumbing or special fixtures for installation, the unit operates on a plug-in basis on any 110-120 volt, 50 or 60 cycle line. An abundance of steam is said to be available within one minute. Frame of the cabinet is of tubular steel, reinforced with wood to withstand weights up to 1,000 lbs.

Healthmaster Steamette

Two atomizers, placed under the seat in the cabinet, supply the steam. Dimensions of the unit are height 36 in., width 24 in., and length 48 in. When folded the dimensions are 10 in., 24 in., and 52 in. respectively. Weight with carrying case for outside calls is 16 lbs.

Covering is a bright pantex material for long wear and easy cleaning, according to the manufacturer.

A Talon zipper for opening and closing the cabinet has an inside pull tab, as well as an outside, grip.



in BEN-HUR Farm and Home Freezers

A COMPLETE LINE to suit ALL Home Needs — Farm and City. FOUR MODELS — 6,9, 12.5 and 18 cubic foot sizes.

EXTRA VALUE in precision-engineered features that assure improved food protection, longer service.

POWERFUL NATIONAL ADVERTISING — Over 6 million readers mean a big prospect list, easier selling.

NATION-WIDE REPUTATION—Thousands of owners are your best boosters for BEN-HUR Freezers.

COMPLETE SELLING MATERIAL — Sales Manuals, Colorful Display Materials, New Direct Mail and Counter Folders — all come to you regularly.

FREE NEWSPAPER AD MATS — Fit all occasions, all seasons, for effective local tie-in.

Check Them All . . . and you'll choose the BEN-HUR Line

Some Choice Territories Still Open . . . Write

BEN-HUR MFG. CO., Dept. AC 634 E. Keefe Ave. MILWAUKEE 12, WISCONSIN

BEN-HUR FARM and HOME FREEZERS

HEALTHFUL LIVING THROUGH FROZEN FOODS

MERCHANDISING MAGIC

FOODS LOOK BETTER, KEEP BETTER and SELL FASTER in a

Fleetwood THE CADILLAC OF REFRIGERATION

DISPLAY CASES
Double Duty • Single Duty • Delicatessen • Dairy
Full Vision • Fish and Poultry

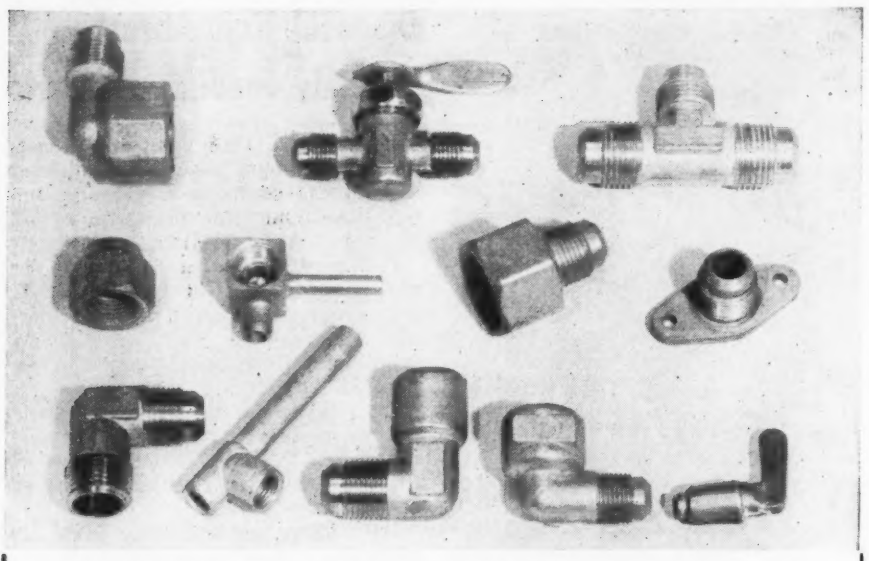
REFRIGERATORS COOLERS SELF SERVICE EQUIPMENT

All-Porcelain interior and exterior. Display equipment has Triple Sealed Thermopane . . . guaranteed 5 years. Pressurized vapor sealing, moulds entire insulation and frame into a single unit for permanent moisture-proof protection.

Fleetwood-Airflow INC. WILKES-BARRE • PENNA

DAIRY WALL CASES | FULL VISION CASE | DELICATESSEN CASE | SELF SERVICE CASES | REACH-IN REFRIGERATORS

CUSTOM-BUILT EQUIPMENT THAT SETS THE NATION'S STANDARDS



MANUFACTURERS OF BRASS FORGED FITTINGS FOR THE REFRIGERATION, GAS, AND AUTOMOTIVE INDUSTRIES

SERVICE METAL INDUSTRIES

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ALCO VALVES

engineered refrigerant controls

Use

ALCO MULTI-OUTLET THERMO VALVES

for best refrigerant distribution

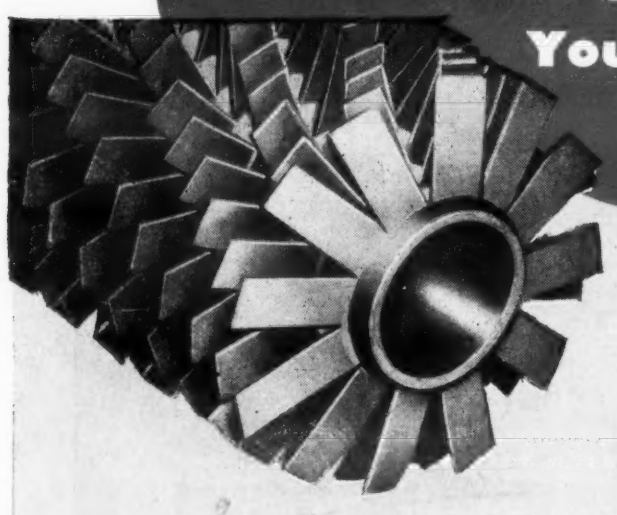
ALCO VALVE CO. 855 KINGSLAND AVE. ST. LOUIS 5, MO.

We

"Custom Tailor"

FINNED TUBING

—To Fit Your Needs



If you're designing a heat transfer unit you may find we can solve most any bothersome problem—because we can "tailor" our tubes so very many ways:

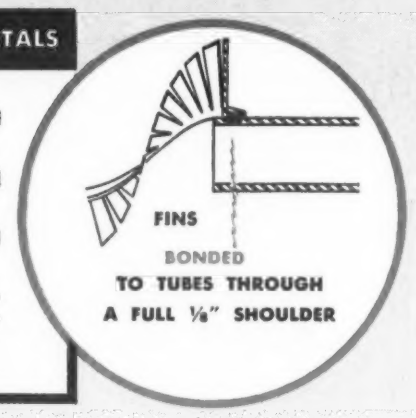
YOUR CHOICE OF METALS

Steel fins can be welded to Steel tubes.

Monel fins can be welded to Steel tubes.

Steel fins can be welded to Cupro-nickel.

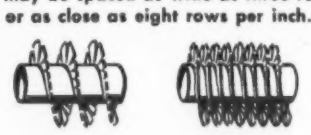
Copper fins can be solder bonded to Steel or Copper tubes.



TILCO FIN TUBING

YOUR CHOICE OF DIMENSIONS

Fins may be spaced as wide as three rows per inch or as close as eight rows per inch.



Fins may be any desired height starting with ¼".

Tubes may be as small as ⅜" in diameter.
Tubes may be as large as 6" in diameter.

● Because of this great manufacturing flexibility (without any extra costs for new dies or special fixtures) we have often been able to make suggestions that have resulted in such typical achievements as—more efficiency with fewer tubes—less space without b. t. u. loss—less costly installations—workable units fitted into awkward areas—more effectiveness than engineers believed possible. It therefore may be interesting to you to ask for our data sheets or, in specific cases, to have us make what suggestions we can. Of course there's no obligation. We'll be delighted to serve you any way at all.

DAVID E. KENNEDY, INC.

350 Fifth Ave., New York 1, N. Y.

Neat Machine Installation Marks Food Bank

5 Units Serve 1,038 Lockers, Facilities

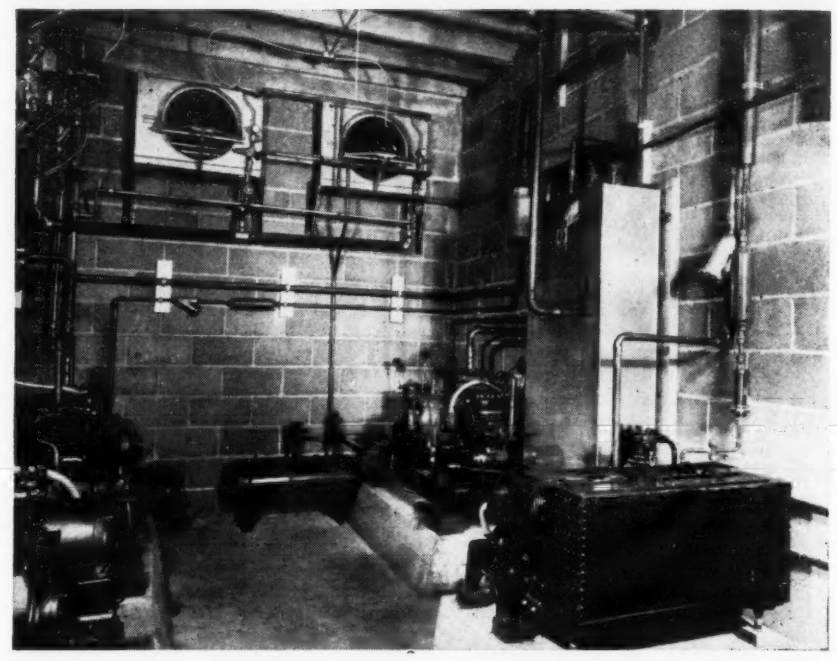
ATHENS, Ohio—Characterized by an unusually neat refrigeration installation, a new locker plant known as the Frozen Food Bank has been placed in operation here by C. C. Bean and his son, Francis.

Located on E. State St. here, the brick and concrete building housing the plant is 50 ft. by 90 ft. in size with a parking lot of 120 ft. by 65 ft. adjoining.

Francis Bean operates the plant, which has 1,038 lockers, a sharp freeze room, chill and age room, and facilities for rendering lard, dressing poultry, and smoking meats. In the front part of the building are located the retail facilities, which include a frozen food case and a meat case. The office is also located up front.

L. C. Blake of Charleston, W. Va., was the contracting engineer who laid out and installed the refrigeration equipment, which includes five condensing units, a Kramer Thermobank, nine Dole plates, five blower coils, and two evaporative condensers. The condensing units are all located in a machine room at the rear of the plant.

Walls of the locker room are insulated with 8 in. of corkboard set in hot asphalt and finished with ½-in. mastic. There are nine Dole plates in the locker room, each being equipped with hand valves on the liquid and suction lines to facilitate changing of expansion valves.



This view of the machine room in the Frozen Food Bank of Athens, Ohio, shows the neat installation made by L. C. Blake of Charleston, W. Va. Note the two evaporative condensers installed in the outside walls.

Two water-cooled Frigidaire condensing units power the locker room. One is a 5-hp. model FE62K, the other a 3-hp. FS6J unit. Temperature of 0° F. is maintained in the locker room.

Adjoining the locker room is a 9 by 14 by 10-ft. sharp freeze room which is insulated with 8 in. of corkboard set in hot asphalt. The floor has 6 in. of corkboard set in hot asphalt with a 4-in. concrete floor above the cork. Walls are finished in mastic.

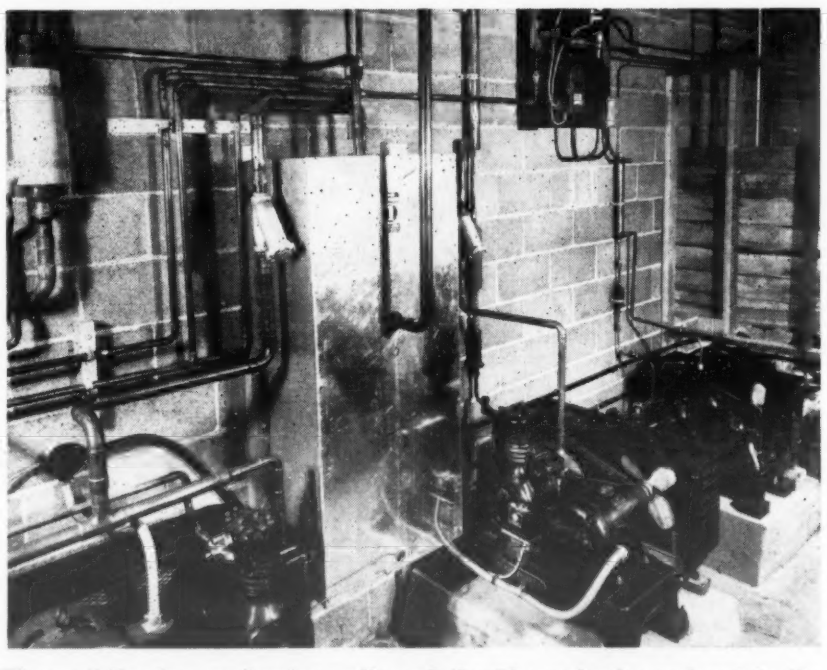
Two Kramer Thermobank coils, type TV280, are installed in the room and are connected to a Thermobank defrosting unit and a 5-hp. water-cooled Frigidaire FE62K condensing unit to maintain a temperature of -15° F. The Thermobank setup permits automatic hot gas defrosting at pre-determined intervals.

A temperature of 40° F. is maintained in the curing room, which measures 9 by 15 by 10 ft. in size. This room also has corkboard insulation finished in mastic and is cooled by a No. CO620 Frigidaire blower coil connected to a ¾-hp. Frigidaire air-cooled condensing unit.

The chill and age rooms each measure 15 by 15 by 11 ft., and each has a Frigidaire CO820 blower coil, both being connected to a 2-hp. condensing unit, which maintains a temperature of 35° F. Control is by means of a solenoid valve and therostat. Five meat tracks have been installed in the chill room which leads directly to the age room.

To minimize the use of condensing water, two evaporative condensers have been installed in the outside walls of the machine room above the condensing units. When the outside temperature falls to 40° F. or less, the water-cooled condensing units can be operated solely off the evaporative condensers, which means quite a saving of water, according to Blake, the engineer.

Young's Electric Service of Athens supplied the condensing units and plates installed in the Bean locker plant.



Three of the five condensing units and the Thermobank employed in the Athens locker plant are shown above. Two 5-hp. Frigidaire water-cooled condensing units supply nine Dole plates in the locker room, while the sharp-freeze room is held at -15° by a single 5-hp. unit.

Filtrine HIGH EFFICIENCY **WATER FILTERS**

TASTES AND ODORS VANISH

Filtrine Filters, in all applications, assure sparkling water — clean to the eye, stimulating to the palate, free of objectionable odors — the kind your customers expect from their coolers!

SELL A FILTRINE FILTER WITH EVERY COOLER ... A NATURAL PROFIT-MAKING TIE-IN!

Several choice areas available for manufacturers' representatives.

FILTRINE MANUFACTURING CO.

53 LEXINGTON AVE., BROOKLYN 5, N.Y.

Manufacturers of Coolers & Filters for over 40 Years

'I'm My Own . . . Salesman'

On tour for General Electric now is this "Walky-Talky" refrigerator. By means of electronic control the demonstrator model is able to move about the sales floor, opening and closing various doors in the interior of the unit. By means of a radio voice emitted from the dummy head at top, the refrigerator is actually able to explain operation of its various features. At left a young lady listens to one of the sales talks.

Oil-Heat Convention Set for Chicago--

(Concluded from Page 1)

Following these talks the speakers will be joined by others in an open forum discussion.

The exposition will be opened Monday April 5 at 1 p.m. by Mayor Martin H. Kennelly of Chicago, while Governor Dwight D. Green of Illinois will be there for a press conference.

"Although our second postwar show, it will be the first showing of truly postwar oil-burning equipment," commented R. S. Bohn, president of the institute.

The exposition will be open from 1 to 10 p.m. the first three days, and from 1 to 5 p.m. on the final day.

In addition to its Thursday morning session, the institute has scheduled its annual business meeting for 10:30 a.m. Tuesday following 9:30 a.m. sessions of the accessory and distribution divisions, and on Wednesday morning there will be three papers of a technical nature.

Stephen P. Cauley of the Socony-Vacuum Oil Co. will discuss "Effects of Revised Specifications on Distillate Fuel Oils with E. B. Delgass, co-author.

A. T. Atwill, president of Quaker Mfg. Co., will talk on "Vaporizing Equipment in 1948," and Fred Hainer, vice president of the Cleaver-Brooks Co., on "Package Steam Units."

A proposed change in the institute's constitution which would broaden the group's activities, form a new division, and set up a laboratory aimed at standardization and research on oil-burning equipment and fuels will be submitted to the membership at its annual meeting here, according to A. E. Hess, managing director of the group.

"The institute structure would be changed under the new constitution from the horizontal structure of the past 25 years to several vertical segments, each containing the elements of the industry interested in the activities of each vertical section. No change is anticipated in the number of members on the executive committee, board of directors, or elected officers of the institute," Hess explained.

The only entertainment feature scheduled for the meeting, other than special events for the ladies, is the annual banquet to be held 7:30 p.m. on Thursday. Details of the entertainment to follow the banquet have not been released.

Institute meetings on Monday, the opening day, will be limited to a board of directors meeting at 10 a.m. Tuesday will include the annual meeting, meetings of the distribution and accessories division, and a luncheon for the newly elected board of directors.

Wednesday morning will feature the technical session, followed by a luncheon for the accessory division. The merchandising program and the banquet on Thursday will close the convention.

Hotpoint Steps Up Output At Water Heater Plant

CHICAGO — Hotpoint dealers are now receiving electric water heaters at a rate of 1,500 per week from the new $11,000,000 Hotpoint, Inc. plant in Milwaukee, Dwight R. Anneaux, manager of water heater sales, announced recently.

The factory is just getting into regular production on the heaters, he noted. By the end of the year the plant is expected to turn out 5,000 units weekly, he added.

Hotpoint officials report that their dealers have observed a growing trend in consumer demand for larger tank sizes such as the 52-gal. unit. Anneaux said that of the 6,000,000 homes wired for electricity from 1942 through 1947, nearly 1,500,000 were in farm areas. He declared that "farm demand for electric water heaters is now consistently higher than at any other time in the history of electrification."

100 California Dealers, Salesmen at Tyler School Learn How To Demonstrate, Sell, and Service Firm's 1948 Line

LOS ANGELES — To familiarize Perfecold Refrigeration Co.'s California dealers with the 1948 Tyler line of refrigeration products, the Tyler Fixture Corp. of Niles, Mich., conducted its first sales school on the Pacific Coast recently at the Perfecold offices here.

More than 100 Perfecold dealers and salesmen from all over California attended the two-day session which featured new equipment demonstrations, instruction in refrigeration merchandising, sales promotion, store planning, equipment servicing, and general discussion periods on Tyler and HarderFreez products.

A new HarderFreez color film, "Frozen Magic," was shown during the school to visually introduce the product's new improvements to HarderFreez dealers. Mrs. Mercedes Gafney, home economist for the Los Angeles City Bureau of Power and Light, demonstrated the preparation of frozen foods for a HarderFreez unit.

Officials of Tyler, including Bob Tyler, president; Fred Eaton, HarderFreez sales manager; Ed Knight, divisional Tyler manager; and Carl Eliason, vice president in charge of national accounts, conducted classes on the Tyler and HarderFreez lines.

D. George Brauer, president of Perfecold of Los Angeles which exclusively distributes Tyler and HarderFreez products in California, was chairman of the school, and Gay Pryor, Perfecold advertising manager, was in charge of the program arrangements.

(Left to right) Bob Tyler, head of Tyler Fixture Corp., D. G. Brauer, president of Perfecold, and Fred Eaton, HarderFreez sales manager, put their heads together in one corner of the Tyler sales school.

Among the Perfecold district sales managers who attended the school were A. S. Toberoff of Los Angeles, Clemens H. Kettenhofen of San Francisco, Marvin Dahl of Oakland, and Charles Bowman of Long Beach.

Perfecold dealers who were present during the two-day meetings were E. A. Hermens, J. M. Argo, and Henry T. Bruneau of San Mateo; L. J. Browne and F. Jodry Smith of Santa Rosa; Ross Laurilliard of Eureka; Al Herdman and H. F. Soden of Pomona; B. P. Hemry of Martinez; Harry Braze, Robert Franklin of Fresno; Carl Hershberger, Lew Pengilly, Henry Clayton, and Larry Bertram of Stockton.

George A. Heintz of Lodi; Joe E. Shapro of Modesto; Joseph F. Cemo of Porterville; Don O. Wilson of Riverside; Daryl F. Kayl of Merced; R. Mather and P. L. Marcyes of Marysville; R. E. Costa of San Jose; Fred Griswold of Santa Barbara; Bob Dotters and Larry Benjamin of Sacramento; John S. Slason of Watsonville; E. C. Flory, Jr. and J. M. Burke of Bakersfield.

C. L. Colbert and Mack McHenry of Ventura; George Myers of Watsonville; H. B. Page of Modesto; H. E. Friedrichs of San Diego; A. R. Lee of Roseville; E. Haverty of Redlands; Bob Thomsen and B. L. Richards of Delano; H. A. Casparie of Fullerton; Howard D. Sipherd, Merle A. Soden, and Austin B. Fordyce of Anaheim; Don Gillespie of Escondido; and B. J. Piercy of Santa Maria.

Food Conservators
Is Our Only Business

All our energy and resources are devoted to their development and production. Write for particulars.

Master Manufacturing Corp.
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Master Food Conservators In Use

KRACK ENGINEERED
UNIT COOLERS
FIN COILS
AIR CONDITIONING
Refrigeration Appliances, Inc.
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REFRIGERATION
AIR CONDITIONING
HEATING PARTS
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SERVICE THAT'S UNSURPASSED
from the
SUPPLY HOUSE THAT SERVICE BUILT

Dependable efficient same-day filling of orders has built our business . . . our reputation. Keep your stocks complete this easy, speedy way . . . just order from our FREE catalog. Saves you time . . . energy . . . money. Prices right. Wholesale only.

SERVICE SP PARTS CO.
2511 LAKE STREET MELROSE PARK, ILL.

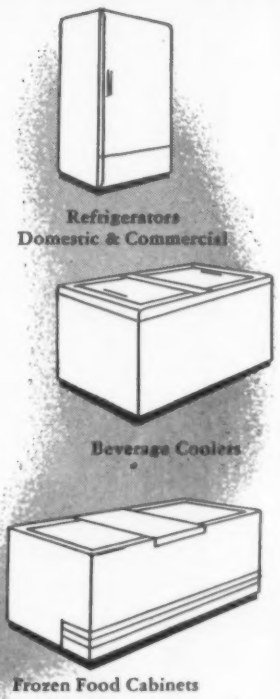
Specify KLIXON Dome-Mounted PROTECTORS

Klixon Protectors—Eliminate Motor Burnouts, Reduce Factory Returns, Build Product Reputation

There's no need for you to put up with motor burnouts in hermetic units . . . especially when you can prevent these costly burnouts by simply using a Klixon Dome-Mounted Protector.

Installed on the dome, a Klixon Protector accurately follows every temperature change . . . and should the motor become overheated, it shuts the power "off" preventing a possible motor burnout. Then when the motor cools sufficiently, the protector snaps "on" the power again automatically permitting the unit to maintain refrigeration.

If you are a manufacturer of hermetic units or a user who incorporates hermetic compressors in refrigeration products that you build, it will pay you to use and specify Klixon Dome-Mounted Protectors. These protectors will cut motor burnouts, minimize service calls, reduce repairs and replacements, reduce factory returns and build product reputation. Write for information.



KLIXON
TRADE MARK REG. U. S. PAT. OFF.
SPENCER THERMOSTAT COMPANY
2404 FOREST STREET, ATTLEBORO, MASS.

KLIXON MOTOR STARTING RELAY
completes the combination required to start and protect the hermetic motor. Its positive action and long life eliminate starting troubles and make it a fitting companion for the Klixon Protector used and recommended by leading refrigeration manufacturers.

Sturm District Manager For United Refrigerator

ST. PAUL—The United Refrigerator Co. has appointed Harry J. Sturm as district manager for eastern Pennsylvania, southern New Jersey, Delaware, Maryland, and the District of Columbia.

Harry J. Sturm

Sturm has been engaged in the distribution and sales of commercial refrigerators for the past 10 years in the east, particularly in the Philadelphia area where he makes his home.

United is increasing its number of district manager in order to better serve its present distributors and set up new accounts in territories which have not been adequately covered, company officials stated.

Bush Mfg. Co. Will Pay Preferred Stock Dividend

WEST HARTFORD, Conn. — The board of directors of Bush Mfg. Co. has voted to pay dividends on two issues of preferred stock on April 1 to stockholders of record March 16, 1948, Ed M. Flannery, vice president, announced recently.

The company will pay 28⅛ cents per share on the 4½% cumulative convertible prior preferred stock and 31¼ cents per share on the 5% noncumulative preferred stock, he said.

When Using Solvents In Cleaning, Degreasing Be Sure To Provide Adequate Ventilation

NEW YORK CITY—The operator or manager of the small plant or shop and the occasional user of solvents frequently need to be reminded that good ventilation is essential whenever and wherever solvents are used, says the Safety Research Institute, Inc.

Unless operations such as degreasing, thinning, cleaning, etc., are provided with adequate ventilation, workers may inhale sufficient quantities of solvent vapors to cause illness.

For occasional solvent operations, it is best to do the job outdoors on a breezy day, whenever possible. When the work must be done indoors, it should be carried out in an airy room near an open window. If adequate natural ventilation is not available, occasional small solvent jobs may be done safely by protecting workers with canister gas masks. Of course, the mask protects only the worker who wears it, and care must be taken that other workers in the room are not exposed to solvent vapors.

For large jobs which are done only at intervals, a portable blower may be the most practical method of providing protection.

Where solvents are used constantly or frequently, it is usually necessary to provide special ventilating equipment. The equipment may be designed to ventilate the entire workroom. In this case, attention should be given to the area immediately around the solvent operation.

For example, a man using solvent to wipe machine parts may be inhaling too much vapor, even though the air in the rest of the room is safe.

Often it is best to use equipment which ventilates locally, that is, which removes the solvent vapor at the point it is released, before it spreads through the workroom. Thus, a ventilated booth, an exhaust hood over the workbench, or a work table with ventilator slots around its edge, can protect the operator and also prevent contamination of the air in the rest of the workroom.

Large continuous solvent operations require the use of fully or partly enclosed equipment from which solvent vapor cannot escape. Even the small plant or shop may find such an installation worth while for an important solvent operation.

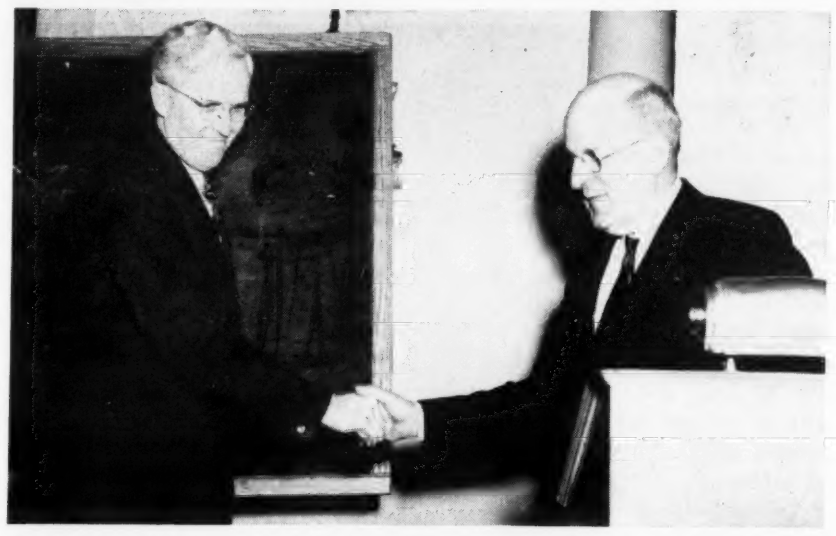
The operator of a small plant can obtain assistance on ventilating problems from the industrial hygiene service of his local health or labor department.

Typhoon Names Lectro-Fridge Western N. Y. Distributor

BUFFALO — The western New York area will henceforth be covered for the Typhoon line of self-contained air conditioners by Lectro-Fridge, Inc., which has just been named distributor.

Henry J. Hahn is president of the company which has offices at 41-43 E. Market St. here.

ASHVE President Takes Office



G. L. Tuve (left), professor of mechanical engineering at the Case School of Applied Science, won a congratulatory handshake from W. H. Driscoll, vice president of Carrier Corp., as he was formally inducted as president of the American Society of Heating & Ventilating Engineers.

N. J. Servicemen Consider Local Chapter of RSES

NEWARK, N. J. — A new local chapter of the Refrigeration Service Engineers Society may be established here if recently formulated plans are carried out during a meeting of service engineers at 8 p.m., April 5, in the auditorium of Lincoln Technical Institute.

The group, to be known as the Garden State Chapter, held a preliminary meeting last month. Approximately 70 servicemen turned out to see a new Tenney valve demonstrated with a glass evaporator by Sid Shapiro of Tenney.

Catholic Heads To Discuss $100 Million Building Plan

CHICAGO—A church building program destined to exceed $100 million and involve the purchase of a proportionate amount of air conditioning and kitchen equipment will be discussed at a meeting of Catholic leaders here June 30-July 3.

Scheduled for the Stevens hotel, the National Catholic Building Convention and Exposition will be host to some 5,000 pastors, religious superiors, and college officials from 118 dioceses.

R. B. Crawford Promoted To V. P., Board Member At Buildice Co., Inc.

CHICAGO — R. B. Crawford has been elected vice president and member of board of directors of Buildice Co., Inc., Chicago industrial refrigeration manufacturer.

R. B. Crawford

Crawford has been with Buildice as sales manager since September, 1947, and will continue in that capacity in addition to his new executive duties.

Prior to his present connection, Crawford served as consulting engineer in Washington and New York for Research Corp., Potomac Electric Power Co., Manager Hotels, Frick Co., and M. W. Kellogg Co.

He will make his headquarters at Buildice company's home office, 2610 South Shields, Chicago. Established in 1942, Buildice manufactures industrial refrigeration equipment and also builds ice skating rinks and sweetwater coolers for dairies. The firm is also a distributor for Worthington Pump & Machinery Co.

Mission Appliance Takes 35-Yr. Lease on Plant

LOS ANGELES—Sale of the Mission Appliance Corp.'s new plant at Crenshaw and El Segundo Blvds. here to the Prudential Insurance Co. of America for $750,000 was announced recently by Mission.

At the same time Mission leased the 11-acre tract, which includes a 140,000 sq. ft. manufacturing plant, from Prudential for 35 years.

Mission's present plans call for a similar sale of its Stanford Ave. plant. The company will retain possession of its McKinley Ave. factory.

Rheem 1947 Net Earnings Set at $3,606,915

SAN FRANCISCO—Rheem Mfg. Co. reports 1947 net earnings of $3,606,915, equal after preferred dividends to $3.48 per common share, according to the 18th annual report released by R. S. Rheem, president.

This is a marked gain over the 1946 net earnings of $1,198,948 or $1.06 a share, when operations were adversely affected by strikes, material shortages, and postwar reconversion.

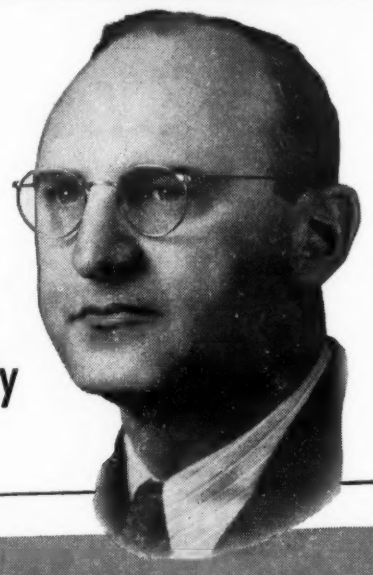
Although the shortage of steel restricted operations to approximately 75% of capacity, net sales totaled $60,258,287, of which $38,054,120 represented home comfort appliances and $22,204,167 steel shipping containers. This is more than a 50% increase over 1946.

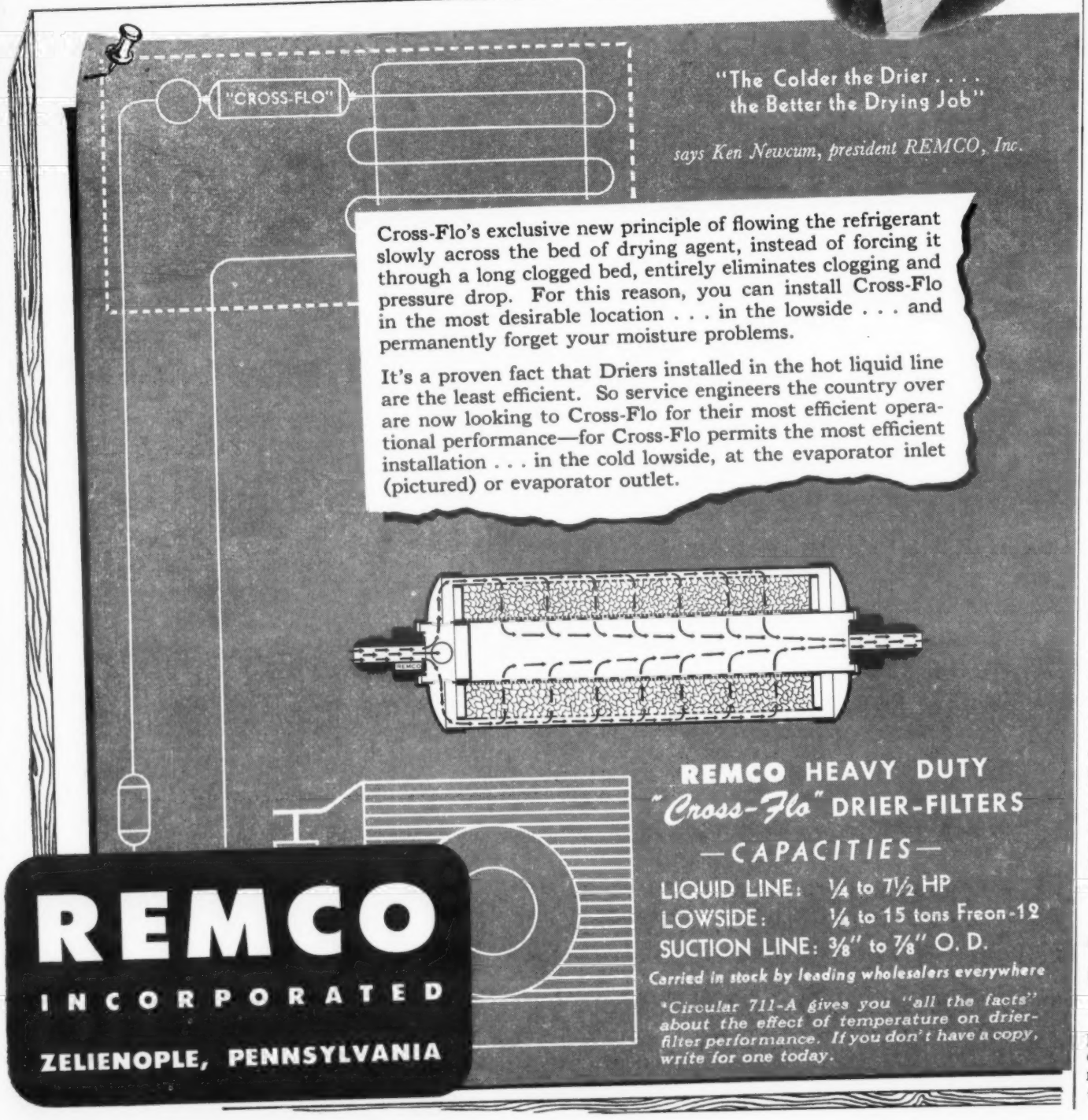
Automatic Heat & Cooling Co. Organized by Tibert Tobes

LOS ANGELES—Tibert Tobes has published a certificate that he is conducting business under the firm name of Automatic Heat & Cooling Co. at 1837 S. Flower St., here.

INSTALL "Cross-Flo" IN THE COLDEST LOCATION

. . . And solve your moisture problems permanently





"The Colder the Drier . . . . the Better the Drying Job"

says Ken Newcum, president REMCO, Inc.

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The Only Publication Servicing the Industry in Canada
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Magazine Editor Finds Refrigerator Repair Beyond Power of His Home 'Tools'

By "Mr. Harper"

(The following piece from the "After Hours" section of the March, 1948 issue of *Harper's Magazine* is reprinted with the permission of *Harper's*.)

The man who first described our industrial civilization as "machine-dominated" has my envy and contempt; he can never have tried to nurse-maid an electric refrigerator back from a period of bad temper and ill health. Anyone who has done so is not that easily frightened. There is nothing quite as squat, moronic, and incompetent as the family refrigerator overcome with fevers and hot flashes, burning out its own bearings in ignorance and frustration.

The one in my household is now running again, but until machines learn to take care of themselves I refuse to be scared by the warnings of philosophers and the fantasies of science-fiction writers.

The sounds of alarm have often come from Europe, a community in which the international word kaput ("broken") means final and utter defeat, and where machinery is regarded either with idolatry or mistrust. The famous play "R.U.R.," in which robots took over their masters, was European and also the product of a generation just beginning to adopt the automobile. Who adjusted the carburetors in those robots?

An American is likely to be repair-minded by contrast, and we have raised the principle of interchangeable parts to the level of Thomas Hornsby Ferril's law, enunciated by him in I Hate Thursday:

"Anything you need for any mechanical solution to any mechanical problem is nearly always within three feet of where you're standing and always within thirty feet."

I wish that were true, because it is a basic principle and the foundation of our national defense. But I have tried it on a refrigerator and it doesn't work—neither paper clips, nor string, nor bobby pins, nor scotch tape.

Machinery, I am now certain, is the weakest pillar in the structure of our society, and without constant repair it would collapse altogether. When the final days are upon us, you will know it from your refrigerator. The first sign is the inability to make ice cubes and the first temptation is the most serious of all: to buy a new one.

Not for Home Repairs!

It appears to be one of the purposes of modern design to make the object unrepairable in the home. The American Boy with the screwdriver who took clocks apart and couldn't get them together again will have to be replaced by a boy with a blow-torch trying to break through the seamless shell.

The steam iron is a molded unit, the screws that hold together recent toasters are countersunk beyond the reach of any available screwdriver, and the cord of the electric beater wears thin at a point where the terminal connections are totally inaccesible. The man from the vacuum cleaner company comes on a repair call, pronounces the new floor model lost forever, and offers you a bargain rate on a turn-in against an even newer model.

If the man were to come from the refrigerator company—but no, you remember that we are a nation of fixers and lovers of machinery, and that our tradition is one of mastery. The man of the house, knowing everything, removes the front panel from the refrigerator and in honor of the national legend burrows into several years' accumulation of oil and dust.

The trouble seemed at first to be with the motor; it had been running much too long and had dripped oil hot enough to char the woodwork beneath. I consulted a local handyman who can repair anything except refrigerators, and he put in a new motor bought at his own rates and resold to me for slightly more. Neither he nor I knew what we were doing.

Engineers will tell you that the evolution of machines should be toward simplicity, but this development has not yet hit my refrigerator, an alien in a world of sealed-in units. The labyrinth of the in-line airplane engine may have been eliminated by jet propulsion and reduced to one moving part; the Silex, which I never did understand, may have given way to the Chemex, a glass bottle and a piece of filter paper—and coffee I like better.

But gadgets like automobiles and refrigerators are running against the stream, away from the day when the grandfather of a friend of mine, baron of a New England mill town, could clean, oil, and reassemble his Model-T every Saturday, hammering out new parts when necessary on his own forge. He had the advantage of understanding his mechanism.

Our refrigerator with the new motor ran two days and froze half a tray of cubes, then relapsed and melted the butter.

We called in professional help, in the person of two refrigerator repairmen named Dave and Frank, and there began several weeks of ice-cube-less living while the two of them fought with that dumb, helpless, mechanical invalid in the corner of the kitchen. From time to time they removed vital organs and took them back to the shop for further consultation.

"You musta joggled the float," said Dave, as indeed I might have. "Or maybe the bellows is stuck." He explained that the bellows is connected to a tube full of gas. The gas expands when the box gets too warm, opening the bellows and making a contact that starts the motor. Both of them always called it "the box." Dave brought a large container of refrigerant gas with him every day and took it away every night, as he did a long tool box filled with special wrenches that seemed to be essential for this job but useless for any other.

At the end of the first week he had succeeded in freezing a full tray, melting it again, and releasing quite a lot of sulphur dioxide in the kitchen.

"If you have any trouble with—ah . . ." said Frank, "well it'll kill them." Damned if it didn't.

Toward the middle of the second week, Dave—in an excess of optimism—pronounced the job done and then departed. His final words were as courtly as his behavior had been throughout: "To the best of my knowledge and belief, sir—and all knowledge is fallible—you got a good box here."

By the next evening the refrigerator was vibrating insanely, thumping the floor, and—no doubt—joggling its own float. I removed the front panel again and, observing that the motor and the pump were out of alignment, tried to reverse the flywheel on the motor. No luck: special octagonal head needed.

Dave and Frank returned, took the whole box away with them, returned with it three days later, and it has been running perfectly ever since.

In an effort to save my mechanical reputation, I asked Frank why it was so difficult to repair a refrigerator.

"You hafta realize," he said, "how many different things can go wrong. We take the box and break it down in the shop, and set it up on the frame. There's about 16 different things it can be, and we may go through all of them before we find it.

"There's . . ." and he began a detailed exposition. "You may not believe this," he said, "but I think of myself as a craftsman. Tear 'em down and build 'em up—buy and sell—that's what I like."

I told Frank that I worked for a magazine, and he suggested an article—"a whole series, that would be the thing"—on how a refrigerator works and what can go wrong with it. He didn't think much of my objection that I didn't quite have it straight myself.

"That's all right. Keep it going from month to month. Make 'em buy the next issue."—MR. HARPER

Detroit ASRE To Hear About War Preparations

DETROIT — "Getting Ready for War" is the timely topic which will be discussed by George F. Taubeneck, editor and publisher of AIR CONDITIONING & REFRIGERATION NEWS, before the Detroit Section, ASRE at 8 p.m. Monday, April 5, at the Rackham building.

Something To Tickle Everyone In the Business

We think that the accompanying reprint of the piece "Not-so-deep Freeze" which appeared in the "After Hours" section of the March *Harper's Magazine* will entertain dealers, engineers, servicemen—anybody who has anything to do with electric refrigerators. Some servicemen may even want to hang it on their walls or use it in promotion pieces.

Harper's is one of the oldest periodicals of literary and general comment in the U. S., and the "After Hours" section is a kind of running commentary on some phases of the current American scene as viewed by the editors. In writing for permission to reprint the NEWS expressed interest in the suggestion made by the serviceman to "Mr. Harper" that the editor write a series of articles on how a refrigerator works and what can go wrong with it. In reply the author wrote:

"It has been interesting to receive a number of letters from people who want to tell us how well their own refrigerator works. The one in question—knock wood—is still going fine, so we will be putting off that series of articles at least until catastrophe strikes again."

Airo Catalog Shows Line Introduced In 1948

CHICAGO—Airo Supply Co.'s new 48-A catalog has just come off the press and is available free upon request.

Many new lines, some of which were on display at the All-Industry Show, have been added to the new booklet, the company said. Other lines, which were unavailable during the war, are again being offered. All material is cross-indexed by brand name and merchandise classification.

Any dealer or refrigeration serviceman may obtain a copy by writing Airo Supply, 2732 N. Ashland, Chicago.

Ted Reuss Named to Represent Strata Aire

MEMPHIS, Tenn.—Ted R. Reuss, who has been selling dairy and farm equipment for the past 18 years, will represent Strata Aire, Inc. in 12 states, announces Fred Wetjen, sales manager. Reuss, who becomes district manager, will supervise merchandising of the firm's line of milk coolers and farm freezers.

Ted R. Reuss

Roof Cooler Device Designed To Reduce Summer Cooling Load

LOS ANGELES—Simple yet efficient cooling of roofs to cut summer heat loads for buildings whether air conditioned or not is claimed for a roof water spray device manufactured here by Siegfried Ruppright, refrigeration engineer and designer, formerly of New York City.

Labeled the Ruppright Rotary Roof Cooler, the device is designed to lay an even spray of water over the roof, and is particularly useful on larger buildings, it is claimed.

The cooler consists of a nozzle which throws a jet of water against the tips of the vanes of a water wheel, which rapidly revolves to break the water stream into drops which fall on a very narrow sector of the roof. The whirling water wheel also rotates the whole cooler assembly through a chain of gears so that the spray will gradually cover the entire roof.

Amount of area covered by the roof cooler can be varied by control of water pressure with a conventional hand valve, and also by adjusting the nozzle of the cooler.

A circle of 48 ft. in diameter (for a 50 x 50 ft. roof) is covered by the roof cooler with a water pressure at the cooler of 18 p.s.i., it is claimed. Under these conditions the unit requires 68 gals. per hour. With 40 p.s.i. water, the cooler will cover a 62 ft. diameter circle and use 113 gals. per hour, it is claimed by the manufacturer.

WRITE FOR BULLETIN R147

KRAMER TRENTON CO. Trenton 5 N. J.

Payne Evaporative Air Cooler Models Feature New Type Filter, Employing Fiberglas Yarns

BEVERLY HILLS, Calif.—A new evaporative air cooler, designed around use of Fiberglas yarns as the air filter, is being introduced by Payne Furnace Co., Beverly Hills.

Models of the new Payne "CoolerAir" are available in seven sizes, providing air cooling capacities for home and commercial requirements. Models range from the window-installation units employed for the direct cooling of a single room or adjacent rooms, to the roof-top-installation units that supply cooled air carried through ducts to ceiling grilles.

Development of the Fiberglas yarn filter, which is the basis of the new cooler, is the result of years of research aimed at finding a filter material that would permit free passage of air, but would not decompose, encourage the growth of algae or fungus, or give rise to odor, it is stated.

Being glass, the new-type filter cannot rot, will not provide sustenance for algae or fungus, and gives off no odor. Each filter contains 5,100 miles of glass filament, twisted into yarns and fluffed into swirls, and provides 236 sq. ft. of evaporative surface. The diameter of the filaments is about one-seventh that of a human hair.

Fresh air enters the Payne evaporative cooler through intake grilles and is drawn through the Fiberglas yarn filters which are sprayed with water by a pump and nozzle, both specially designed to meet the requirements of the filters.

According to size, the CoolerAir delivers from 600 to 8,400 c.f.m. The filters are self-cleaning, due to the ample volume and pressure of water which prevent dust accumulation. Long life of the filters saves replacement expense, it is stated.

Water running off the filters is collected in a tank and re-circulated by the pump, making it possible to use the same water over and over again. Because the pump is driven by the main motor there is no need for an auxiliary motor. Lubrication is required only once each season. The cabinet of the CoolerAir is of weatherproof aluminum.

Hathaway Will Represent Wilson Refrigeration, Inc.

SMYRNA, Del.—B. G. Hathaway has been appointed factory sales representative for Wilson Refrigeration, Inc., covering Southern California and Arizona, it has been announced here by A. A. Davis, vice president and general sales manager.

With Santa Monica, Calif., as his headquarters, Hathaway will extend the sales set-up in that region for Wilson farm and home freeezers, milk coolers, and commercial refrigeration. He was formerly factory sales engineer for Tenney Engineering, Inc., Newark, N. J., and prior to that was service engineer for Drayer-Hanson Co.

Ebco Releases Booklet On Water Cooler Service

COLUMBUS, Ohio—A comprehensive guide for electric water cooler servicemen has just been released by the Ebco Mfg. Co. here.

The publication is entitled "Service Manual and Parts List—Electric Water Coolers." It was compiled under the general supervision of Louis P. Benua, Ebco general works manager.

A. R. Benua, president of the Ebco, said that the manual was compiled particularly for the benefit of those servicing Kelvinator-refrigerated coolers, but that it will prove to be of inestimable value to all water cooler servicemen.

The manual is written in simple language and tells, step by step, how to properly service coolers. Bona fide electric water cooler service may procure copies of the "Service Manual and Parts List—Electric Water Coolers" at Ebco Mfg. Co., 401 W. Town St., Columbus.

Corcoran Quits Bickford Bros., Joins Interstate Electric Co.

ROCHESTER, N. Y. — Charles Corcoran has resigned as general sales manager of Bickford Brothers Co., Rochester and Buffalo, after an association of seven years with the firm.

Corcoran has joined the Interstate Electric Co., New Orleans, as assistant to the president and will handle public relations and sales promotion.

General Works Manager

JOHN W. CRAIG

* * *

John W. Craig Promotion Announced by Crosley

CINCINNATI—Promotion of John W. Craig to general works manager of Crosley Division, Avco Mfg. Corp., has been announced by R. C. Cosgrove, Crosley general manager and vice president of Avco.

Since 1945, Craig has been works manager of the Crosley refrigerator plant in Richmond, Ind.

His new duties include direction of all manufacturing and purchasing operations of Crosley and the Carrollton Furniture Co., of Carrollton, Ky., an Avco subsidiary manufacturing radio and television cabinets.

Swedish American Liner Has Individual Air Controls

NEW YORK CITY — Individual control of temperature and air conditioning is a feature of the "built for comfort" passenger accommodations and public rooms in the new Swedish American motor liner *Stockholm*, now in New York after its maiden voyage from Sweden.

Air conditioning controls provide a continuous flow of fresh air in each cabin. Temperature is held automatically at a fixed point, never varying more than one and a half to two degrees, plus or minus. Thus, with ship thermostats set at 70° F., the interior temperature will not rise above 71° F. or fall below 69° F., regardless of outside conditions.

Temperature and air conditioning controls are operated on a pneumatic system, described by Minneapolis-Honeywell engineers as a modulating system. Modulated control is further described as one which permits a continuous flow of heat which is held to within the limits already noted.

All the public rooms, such as the salons, restaurant, etc., are equipped with thermostatic modulated control. The cabins have individual controls.

N.Y. Refrigeration Guild Considers County Chapters To Fulfill Local Needs

NEW YORK CITY—At the last meeting of the board of directors of the Refrigeration & Air Conditioning Guild of New York City, Theodore A. Reina, president of M & R Refrigeration Corp., proposed that the guild operate under a county chapter system for purely local county problems.

Reina stated that the time has come for trade organizations in general, and the Refrigeration Contractor Associations in particular, to become realistic about everyday problems, "to worry about the trees, rather than the forest." This can be done by the creation of county chapters.

He added that it should not be forgotten that the refrigeration guild must handle broad policy and that the local groups should handle specific local problems. He continued that it was important to get better acquainted with one's competitors in the same area. Local chapters should meet at each other's place of business at least once a month and hold informal meetings discussing "down to earth, bread and butter questions" which affect their immediate business welfare.

By no means, Reina stated, does he minimize the value of the National Association of Refrigeration Contractors in creating and establishing national policy and the refrigeration guild for creating and establishing broad over-all policy for the refrigeration contractor industry in New York City. In fact, without them, the local chapters would not operate successfully for any length of time.

The plan envisions having a separate chairman and secretary for each county. Each county will elect two delegates and these delegates, together with the regular officers of the guild, will form the new board of directors of the guild.

The reason for this proposal is that it has been discovered that problems in one county, although of general interest to all the members of the guild, may not be of particular interest and importance to contractors in another county. Also, it was found that guild activity covers such a wide field of activity and there are so many different problems that all the activity scheduled for a particular guild meeting cannot be completed.

It, therefore, seems advisable that in a city the size of New York, having a population and a market area greater than most states, that the problem should be handled a little differently than the usual and ordinary local refrigeration contractors associations.

The board of directors received this proposal with a good deal of interest. President Robert Towse immediately appointed Reina as chairman of a fact finding committee to bring in a completed program for this plan at the next board of directors meeting for immediate action.

DOUBLE-TUBE COUNTER-FLOW CLEANABLE WATER-COOLED CONDENSERS

This is the Business End of . . .

HALSTEAD & MITCHELL

Cleanable CONDENSERS

Service Engineers and commercial users throughout the refrigeration industry are now specifying HM Condensers for replacement and conversion orders. These new HM units combine two features never before obtainable in tube-within-a-tube water-cooled condensers; (1) They're CLEANABLE . . . the water tubes are easily accessible at both ends for the spiral cleaning tool to restore the interior water surfaces to "new-unit" efficiency. (2) A TRUE-COUNTER-FLOW relationship is achieved between the coolant and the refrigerant through a unique seamless copper tube-within-a-tube construction that makes obsolete most types of similar water-cooled condensers. Thus, water and space requirements are reduced substantially and a most economical operation is obtained.

JOBBERS in all principal cities carry HM condensers in stock for immediate delivery.

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Exterior of heavy gauged steel finished in lustrous baked-on black or white enamel. Doors center window and trim in high polished Stainless Steel. Hinged doors and window triple glazed in live rubber to prevent fogging. Interior of heavy steel finished in dull black.

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Manufacturers of Custom-Built Refrigerators Over A Quarter Century

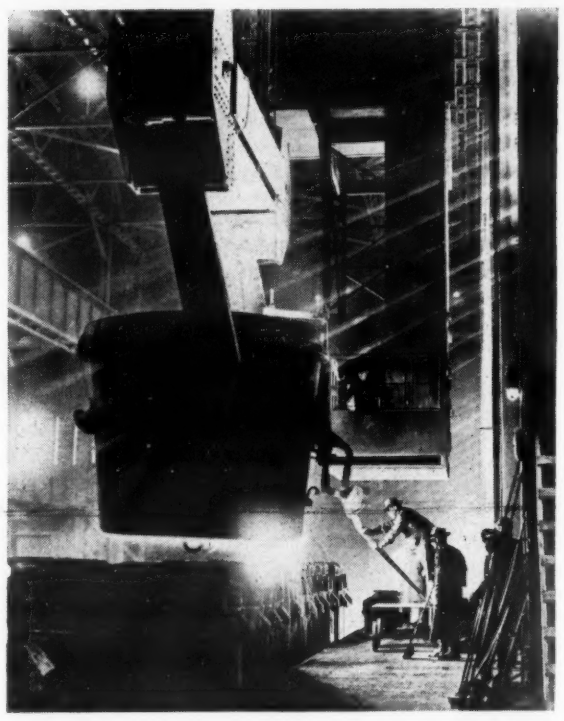
Crane Cab Cooling

Noxious Gases, 140° Cab Prove Challenge To Design of Self-Contained Unit

PITTSBURGH — Air conditioning of crane cabs in steel mills to reduce air temperatures from highs of 140° F. and to eliminate noxious fumes and gases has been accomplished successfully with mechanical refrigeration, declares the Dravo Corp. here.

This announcement comes two years after the first installation of the Dravo-developed unit, the company says, pointing out that industry long has been aware of the extreme conditions under which operators of cranes handling hot metal have to work.

Large fans were first used in the cabs, but about all these succeeded in doing was to change the air—hot air for hot air. Cakes of ice have also been placed in a specially built chamber and the air blown over them and into the cab. Besides being comparatively inefficient and incapable of cooling the air sufficiently, this practice added the serious problem of disposal of water resulting from melting ice.



AT RIGHT: Crane cab at steel mill using Dravo cooler.

When "dry ice" became commercially available about 20 years ago this was tried in place of ice because it did not drip water and lasted a little longer than ice, but, says Dravo, neither this system, nor any that preceded it, offered any control over the temperature in the cab and none attempted to remove the fumes or gases.

Considerable improvement over earlier methods was effected with the introduction 10 or 12 years ago of air conditioning units employing water for condensing purposes.

The most important troubles from this type of unit developed from the use of water for condensing. First, a water storage tank had to be mounted on the crane. This had to be filled intermittently and thus there were many crane stoppages. It also was necessary to install a water line near the crane rail as a source of water supply. In some installations a pump was needed to insure sufficient pressure at that height.

The chief disadvantage in this equipment, and an inherent one, was that the water in the storage tank absorbed heat from the high-temperature air surrounding the cab. The water became so warm that it was almost impossible to condense the refrigerant.

In 1943, Dravo made an installation that used air as a condensing medium and required only electrical connections for operation. This installation was made on a crane operating over lead vats and fume removal equipment was incorporated.

Performance of this first installation led Dravo to start production of a completely self-contained standard crane cab air conditioning unit for general industrial use.

The first of these units was installed two years ago on a 185-ton ladle crane in the Aliquippa Works of the Jones & Laughlin Steel Corp. Although air surrounding the crane is 140°, that within the cab is held automatically and continuously at 80°.

This plant has operated on a 24-hour-a-day schedule for many months of that two-year period, but even under these conditions there has not been a single breakdown or failure and no maintenance except normal replacement of filters, Dravo asserts.

Where extremely high temperatures exist in the crane cab working zone it has been found advisable to insulate the cab. In all installations, the cab, or that area in which the operator works, should be totally enclosed.

At Jones & Laughlin the roof and walls are insulated with 3 in., and the floor with 3½ in. of Fiberglas. In addition, a steel heat shield is suspended 6 in. beneath the floor of the cab.

The complete, self-contained cooling unit is 7 ft. long, 2½ ft. wide, and 4 ft. high. It is mounted directly on top of the cab, thus eliminating the need for any kind of ductwork.

Where working zone temperatures no higher than 125° F. exist, the crane need not be insulated because the unit has sufficient cooling capacity.

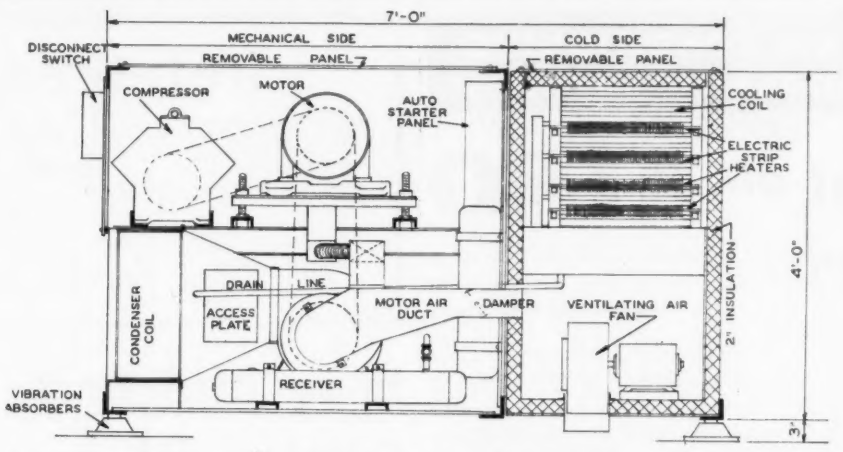
The Dravo crane cab cooler uses "Freon-114" as a refrigerant instead of "Freon-12" that usually is employed in air conditioning systems. "Freon-114" was selected because it has a considerably higher boiling point than the other and thus permits a lower operating pressure under the extreme conditions of high ambient temperatures.

Not only is the air that enters the cab filtered twice, but twice-filtered air also is used to ventilate the motors. Dust-free ventilating air for the motor reduces wear on the brushes and moving surfaces.

The cooler circulates 400 c.f.m. of air through the cab. Three-fourths of this is recirculated, while the balance is make-up air brought into the unit through two filters and activated carbon canisters for removing fumes.

An air diffuser is installed in the top of the cab and, therefore, no duct is required. The diffuser was selected so it not only would give a diffusing effect immediately around the operator, but also would move the air along the inside surfaces of the cab to reduce the radiant effect generated by the abnormally high temperatures outside.

For winter heating, the air passes over electric strip heaters.



Profile view shows how Dravo crane cab cooler is divided into two sections, "mechanical side" and "cold side." Designed for year-round use, the Dravo unit has both electric strip heaters and cooling coils. Air passing over these areas will supply warm or cool temperature for the operator in the cab.

Trane Co. Net Sales Rise $7 Million over 1946

LA CROSSE, Wis. — The consolidated net sales of the Trane Co. in 1947 were the largest in the history of the organization, according to the recently released annual report of The Trane Co. and its subsidiary, Trane Co. of Canada, Ltd.

In 1947, sales amounted to $20,956,830 as compared with $13,839,855 for the year 1946.

Consolidated net income as reported by Reuben N. Trane, president, was $2,102,234 in 1947, while the 1946 net income was $1,187,921.

Dividends of $2.00 per share were paid on the common stock in 1947, as compared with $1.00 per share in 1946.

The increase in net sales was made possible by the utilization of expanded production facilities which resulted from a program of expansion started in 1945 and completed in early 1947, it was stated.

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with usAIRco's new "STORE CONDITIONER" advertising!

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You'll find a new hermetically-sealed motor-compressor unit in the usAIRco Store Conditioner. And, that means no refrigerant seal to give trouble or require servicing. You'll also find a new water-saving condenser coil, designed by usAIRco engineers to remove the generated heat from the compressor most efficiently and economically. And, there are many other outstanding features in the new usAIRco Store Conditioner that will make it easier for you to sell self-contained air conditioning.

Write today for your copy, *Dealers' Sales Kit—usAIRco Refrigerated-Packaged Air Conditioning.*

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Como Avenue S. E. at 33rd Minneapolis 14, Minn.

A DEALERS' SALES KIT FOR YOU!
Colorful, sales-getting literature
Ad mats for your own local advertising
Attractive direct mail enclosures for use with your letters and statements.

usAIRco Air Conditioning EQUIPMENT

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Please rush my copy of your Dealers' Sales Kit on new usAIRco Refrigerated-Packaged Air Conditioning.
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Refrigeration Problems

And Their Solution

By P. B. Reed

For Service and Installation Engineers

Manager, Refrigeration and Air Conditioning Division, Perfex Corp.

Filling Refrigerant Cylinders (1)

There is hardly a refrigeration service engineer who has not known of an accident resulting from the bursting of a refrigerant cylinder. Usually the cylinder burst because it had been overfilled by the man himself or by some other person who filled the cylinder. When an accident of this kind occurs, we ordinarily attribute it to overfilling due to carelessness, and this is true in most such instances.

But a cylinder that has not been overfilled can, under circumstances that can easily occur, burst even though it has been filled according to all the rules.

What are the rules that govern the filling of refrigerant cylinders? Who makes these rules? In what pressures and other conditions are these rules based? How can it be determined how much refrigerant can be safely put in a cylinder? Are these rules correct; do they adequately protect against possible accidents from bursting cylinders?

The Interstate Commerce Commission, under the U. S. Department of Commerce, is given the authority to regulate the transportation of various commodities from one state to another. The activities of the I. C. C. are so broad that they delegate the control of the transportation of such things as petroleum products, explosives, refrigerants, and other materials that may be inflammable or otherwise involve some hazard, to the Bureau of Explosives of the Association of American Railroads.

So in effect, the Bureau of Explosives regulates all matters relating to the construction, filling capacity, testing marking and safety devices for refrigerant cylinders.

I.C.C. TARIFF NO. 4

Their regulations are contained in and scattered through a large mass of material classed together under Tariff Number 4 and some 16 supplements to it, that are published by the Bureau of Explosives. These rules originated some 30 years or more ago and then included the regulation of the few refrigerants that were in common use at that time, such as ammonia, carbon dioxide, and sulphur dioxide.

As other refrigerants such as methyl chloride and "Freon-12" came into use, supplementary rules were added to the regulations to cover these new refrigerants. Inasmuch as these regulations grew piece by piece, some inconsistencies have crept in and there has been no general revision to codify and coordinate the regulations.

Before we can properly understand the I.C.C. regulations, we must study the conditions that have a bearing on safety and other factors that the regulations are intended to control.

STRENGTH OF CYLINDER DEPENDS ON REFRIGERANT TEMPERATURES

The strength and construction of a cylinder designed to contain refrigerant or any liquified gas, depends upon, among other things, the saturation temperature-pressure characteristics of that particular refrigerant. Some refrigerants have saturation pressures at ordinary room temperatures that are very high, others quite low.

For example, at a room temperature of 60°, the pressure in a cylinder containing some liquid sulphur dioxide is 25.6 pounds per square inch gauge (abbreviated p.s.i.g.). If the cylinder contained some liquid carbon dioxide also at 60°, the pressure would be 733.9 p.s.i.g.

MUST CONTAIN BOTH LIQUID AND VAPOR

At 60° the pressures will always be 25.6 for SO_2 and 733.9 for CO_2, *provided, that there is some liquid in the cylinder and provided that there is still some gas space left in the cylinder,* that is, that the cylinder is not completely filled with liquid.

These would be the pressures in the cylinder, whether there was only an inch of liquid in the bottom of the cylinder or whether the cylinder was almost, but not quite, completely full of liquid.

Table 1 shows the saturation temperatures and pressures of several of the commonly used refrigerants under the above conditions. That is, the pressures shown are those that would exist in a cylinder partially but not completely filled with some of the liquid refrigerant.

From Table 1 it is obvious that a cylinder for ethane or carbon dioxide will have to be built much stronger than one for methylene chloride. These are extremes; but it can be seen that a cylinder to contain one of the medium-pressure refrigerants, such as "Freon-12," need not be built as strong nor tested to as high a pressure as a cylinder for one of the high-pressure refrigerants such as ethane or carbon dioxide. The same holds true for the low-pressure refrigerants, such as methylene chloride, "Freon-113" or "Freon-11," in comparison with the medium-pressure refrigerants.

If, therefore, we were sure that a

(Continued on next page)

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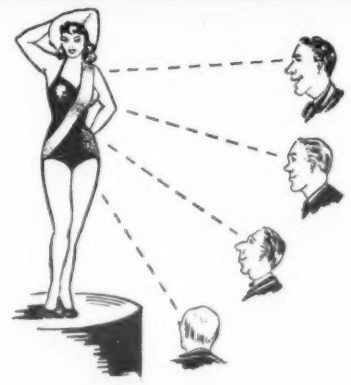

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Temperature-Pressure Saturation

TABLE 1

Refrigerant	Pressures in p.s.i.g. at various room temperatures with some liquid in the cylinder						
	50°	60°	70°	80°	90°	100°	130°
Ammonia	74.5	92.9	114.1	138.3	165.9	197.2	315.6
Butane	6.9	11.6	16.9	22.9	29.8	37.5	66.7
Carbon Dioxide	638.9	733.9	838.7	954.0	†	†	†
Ethane	422.8	486.0	545.7	621.9	†	†	†
"Freon-11"	12*	7.7*	2.6	1.6	5.0	8.9	24.3
"Freon-12"	46.7	57.7	70.1	84.1	99.6	116.9	180.2
"Freon-21"	.6	4.2	8.4	13.3	18.9	25.3	50.5
"Freon-22"	84.7	102.5	122.5	145.0	170.1	197.9	300.0
"Freon-113"	22.9*	21.0*	18.7*	15.9*	12.5*	8.6*	3.7
"Freon-114"	4.0	8.1	12.9	18.5	24.6	31.7	58.8
Isobutane	17.8	24.0	31.1	39.2	48.6	59.0	97.3
Methyl Chloride	37.3	47.3	58.7	71.6	85.9	102.0	161.1
Methylene Chloride	21.2*	18.7*	15.6*	12.0*	7.8*	2.9*	8.1
Propane	77.1	92.4	109.3	128.1	149.0	172.0	257.3
Sulphur Dioxide	18.2	25.6	34.4	44.6	56.3	69.4	121.1
Water	29.6*	29.4*	29.2*	28.9*	28.5*	28.0*	25.3*

†Above critical temperature—Pressure depends upon amount of refrigerant in the Cylinder.
*Vacuum in inches of mercury.

Refrigerant Cylinders Constructed To Withstand 130° Temperature of Desert

(Continued from preceding page)

cylinder one-half full of "Freon-12," for example, would never get warmer than 100°, it would be necessary to construct the cylinder to stand only 117 p.s.i.g., with some added as a safety factor to be sure that the cylinder would still be strong enough even if the temperature did go somewhat above 100° and cause the pressure to rise above 117 p.s.i.g.

130° MAXIMUM FOR TRANSPORT

About the highest temperature encountered in the United States is in some of the deserts in the Southwest. Manufacturers of controls and similar devices design them to withstand a temperature during transportation, of about 130°, and a pressure in their power elements caused by a temperature of 130°, so that they can pass through these hot deserts without damage.

If we accept 130° as the maximum temperature to which a cylinder of refrigerant would be subjected in transportation, that is, in passing through one of the deserts of the Southwest in a box-car or truck, the last column in Table 1 shows the highest pressure the cylinder would have to withstand, provided that there was still some gas space in the cylinder, that is, it was not completely full of liquid refrigerant.

Thus, at a temperature of 130° a cylinder for ammonia would have to stand a pressure of 315.6 p.s.i.g.; for "Freon-11" only 24.3 p.s.i.g., and for methylene chloride only 8.1 p.s.i.g.

At 105° the pressure in the methylene chloride cylinder is zero p.s.i.g. so there would be no difference in pressure between the inside and outside of the cylinder and the container would have to withstand no pressure at 105°.

In fact, the cylinder containing methylene chloride would be subjected to higher pressures the colder the room is below 105°, for the pressure inside the cylinder goes down as the temperature does and thus causes a higher vacuum, consequently a difference between the inside and the higher pressure of the atmosphere on the outside of the cylinder, and this tends to crush the cylinder, instead of bulge it outward.

In a 100° room this pressure is 2.9 inches of mercury vacuum or a little over one pound per square inch pressure on the cylinder. At 60° this outside pressure of the atmosphere on the cylinder is about 10½ p.s.i.g., equal to 21.2 inches of mercury vacuum.

PRESSURE OF METHYLENE CHLORIDE NO FACTOR

So the containers for methylene chloride can be of light material that need only to withstand the physical banging around they get in transportation and handling. There is very little pressure on them, one way or another, for the pressures are allowed to equalize and there is some air in the container and the liquid methylene chloride is poured in and out of the container the same as water, oil, or other liquid whose boiling point is below ordinary room temperatures at atmospheric pressure.

(To Be Continued)

Electronics Control Train Temperature To One-Tenth of Degree

WASHINGTON, D. C. — "Trains are now being equipped with electronic air conditioning and heating control systems which are so sensitive they react to the effects of sunshine and shade on opposite sides of the car," Gordon Volkenant told the March meeting of the Washington D. C. Section of the American Society of Heating and Ventilating Engineers.

Volkenant is associate director of research for the Minneapolis-Honeywell Regulator Co.

"Electronics has given man a sixth sense, enabling him to see, taste, hear, and feel things he had never been able to detect before," Volkenant said. "Yet with all of its mystical qualities, the electronic tube actually is little more than a glass bottle, a tin can, bent hairpin, and a piece of window screen."

To prove his point, he assembled one for the benefit of his audience.

"Electronics offers a method of doing in a simple manner many things that otherwise would be difficult or impossible," Volkenant said. "These little tubes can count, see, feel, hear, measure, record, memorize, detect invisible vapors, measure smoke and fog, and determine exactly what portion of a pinch of salt is contained in a vat of soup.

"They make it possible to measure the light of a star 250 light years away, to measure the heat of a candle outside the range of human vision, to control precisely the temperature and humidity in a home or a steel mill.

"Electronics also can be used to open the garage door or protect the home from disease," Volkenant continued. "Dust collectors can eliminate well over 90% of all dust, dirt, lint, pollen, moulds, bacteria and viruses that contaminate a house.

"One outgrowth of wartime developments is Moduflow, a new heating control system which is a first cousin of airplane cabin pressure and temperature control equipment. This new domestic system provides the home with an even flow of heat, regulating the input so it is exactly equal to the loss. For the first time since the beginning of the world, we have been able to provide a heating system that functions like that of the human body.

"Electronics is just another word for 'control,'" Volkenant declared. "Push-button controls rapidly are becoming old-fashioned. The public is too busy to push buttons. It wants things to happen automatically. We have more than 7,000 automatic control devices now and new ones are being developed continually.

"For example, in those trains which are being equipped with electronic air conditioning and heating controls, thermostats are sensitive to a change of one-tenth of a degree."

Cauhorn To Distribute Mystik

CHICAGO—Appointment of Cauhorn Distributing Co. as distributor for Mystik Dri-Pipe insulation in eastern Michigan has been announced by R. J. Schuler, manager of sales for Mystik Adhesive Products Co.

Fixture Firm Sets Up on Coast

LOS ANGELES — General Showcase & Fixture Manufacturers is the firm name under which Henry Wolczanki and Frank G. Furtsch have published a certificate that they are conducting business at 1255 West 16th St., Los Angeles.

Pierce, Petersen Get New Lynch Corp. Sales Posts

TOLEDO—A. V. "Pete" Petersen has been appointed as district sales manager of the southeastern district of Par Compressor Division, Lynch Corp., reports R. L. Sears, director of sales.

A. V. Petersen

Petersen, who spent the last year-and-a-half as assistant to Sears in the home office, will make his headquarters at Atlanta.

Cal Pierce, formerly sales chief in the southeastern district, has been transferred to the west coast as district sales manager, and will make his headquarters in San Francisco.

Both Petersen and Pierce will have charge of all sales and service on Par condensing units in their respective territories.

C.F. Holiman Manages Houston Sales Office for Sunroc Co.

HOUSTON, Tex.—The Sunroc Co., sales agency for the Sunroc Refrigeration Co., water cooler manufacturer, has opened a new branch office in suite 229 Shell building here.

C. F. Holiman, formerly with the War Assets Administration in Houston, has been named to manage the new branch, a company announcement said.

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The KEY to AIR CONDITIONING

by James J. LaSalvia

Sheet Metal Ducts (Cont.)

SHEET METAL JOINTS

Sheet metal ducts are made with two joints, the longitudinal seam and transverse seam joints.

There are many types of longitudinal seams and transverse joints, but the ones mostly used are shown below. (See Fig. 4.)

Longitudinal seams:
1. Flat lock.
2. Pittsburgh lock.

Transverse joints:
1. Slip joint.
2. Standing seam.
3. Reinforced standing seam.

VELOCITY METHOD IN SIZING DUCTS

The velocity method of sizing ducts is used mostly in a duct system with a short straight run with no more than five or six outlets. (See Fig. 5.)

The velocities in ducts A, B, C, D, and E are fixed arbitrarily.

Velocity at "A" should be between 1,000 and 1,200 ft. near the fan, and gradually stepping down at B, C, D, so that the velocity at "E" at end of duct should be about 600 to 88 f.p.m.

Assume the fan is to supply 3,200 c f.m. and that each outlet is to supply the following amount of air:

Outlet No. 1 supplies 800 c.f.m.
Outlet No. 2 supplies 600 c.f.m.
Outlet No. 3 supplies 600 c.f.m.
Outlet No. 4 supplies 600 c.f.m.
Outlet No. 5 supplies 600 c.f.m.

Assume outlet velocity at the fan as 1,500 f.p.m., and also following velocities in various ducts:

Velocity in duct A to be 1,200 f.p.m.
Velocity in duct B to be 1,100 f.p.m.
Velocity in duct C to be 1,000 f.p.m.
Velocity in duct D to be 900 f.p.m.
Velocity in duct E to be 800 f.p.m.

The formula used in sizing ducts in this method is $A = \frac{\text{C.f.m.}}{\text{Velocity}}$.

In sizing ducts always start from the end of the duct system.

No. 1 outlet supplies 800 c.f.m. Therefore,

$$A = \frac{800 \text{ c.f.m.}}{800 \text{ ft. velocity}}$$

A = 1 sq. ft. or 144 sq. in.

Assume the duct to be held at 12 in. high throughout.

Therefore, the width of the duct will be $\frac{144}{12}$ or 12 in.

Size of duct E is 12 in. x 12 in.
No. 1 Outlet 800 c.f.m.
No. 2 Outlet 600 c.f.m.

1,400 c.f.m. airflow through duct D

$$A = \frac{1{,}400 \text{ c.f.m.}}{900 \text{ ft. velocity}}$$

A = 1.55 sq. ft.
A = 1.55 x 144 or 223 sq. in.

Keeping height of duct same as above 12 in., size of duct D is $\frac{223}{12}$ or 18 in. x 12 in.

No. 1 Outlet 800 c.f.m.
No. 2 Outlet 600 c.f.m.
No. 3 Outlet 600 c.f.m.

2,000 c.f.m. airflow through duct C

$$A = \frac{2{,}000 \text{ c.f.m.}}{1{,}000 \text{ ft. velocity}}$$

A = 2 sq. ft.
A = 2 x 144 or 288 sq. in.

Keeping height of duct same as above 12 in., size of duct C is $\frac{288}{12}$ or 24 in. x 12 in.

No. 1 Outlet 800 c.f.m.
No. 2 Outlet 600 c.f.m.
No. 3 Outlet 600 c.f.m.
No. 4 Outlet 600 c.f.m.

2,600 c.f.m. airflow through duct B

$$A = \frac{2{,}600 \text{ c.f.m.}}{1{,}100 \text{ ft. velocity}}$$

A = 2.36 sq. ft.
A = 2.36 x 144 or 340 sq. in.

Keeping height of duct same as above 12 in., size of duct B is $\frac{340}{12}$ or 28 in. x 12 in.

No. 1 Outlet 800 c.f.m.
No. 2 Outlet 600 c.f.m.
No. 3 Outlet 600 c.f.m.
No. 4 Outlet 600 c.f.m.
No. 5 Outlet 600 c.f.m.

3,200 c.f.m. airflow through duct A

$$A = \frac{3{,}200 \text{ c.f.m.}}{1{,}200 \text{ ft. velocity}}$$

A = 2.67 sq. ft.
A = 2.36 x 144 = 384 sq. in.

Keeping height of duct same as above 12 in., size of duct A is $\frac{384}{12}$ or 32 in. x 12 in.

Assume the outlet of the fan in this case to be 20 in. x 15 in. (The size of fan can be obtained from the fan manufacturers' catalogs.)

Therefore, a transition piece will be required to connect fan to duct. Next to fan, a canvas connection the same dimensions as opening at fan will be provided, and the transition piece will be 20 in. x 15 in. at one end and 32 in. x 12 in. at the other.

Other transition pieces will be required to connect the above ducts and will be as follows:

Between ducts A and B transition piece 32 in. x 12 in. to 28 in. x 12 in.

Between ducts B and C transition piece 28 in. x 12 in. to 24 in. x 12 in.

Between ducts C and D transition piece 24 in. x 12. in. to 18 in. x 12 in.

Between ducts D and E transition piece 18 in. x 12 in. to 12 in. x 12 in.

There will also be splitter dampers at openings 2, 3, 4, and 5 with quadrants below the duct to operate the damper.

The recirculating duct to the coil chamber should be figured for a velocity entering the chamber at 800 to 1,000 f.p.m. but no higher for good practice.

The same procedure as above is used in sizing the recirculating duct.

The outside air duct is usually figured from 500 to 800 f.p.m. velocity.

(To Be Continued)

Typical Straight Run Duct System Sized by the Velocity Method

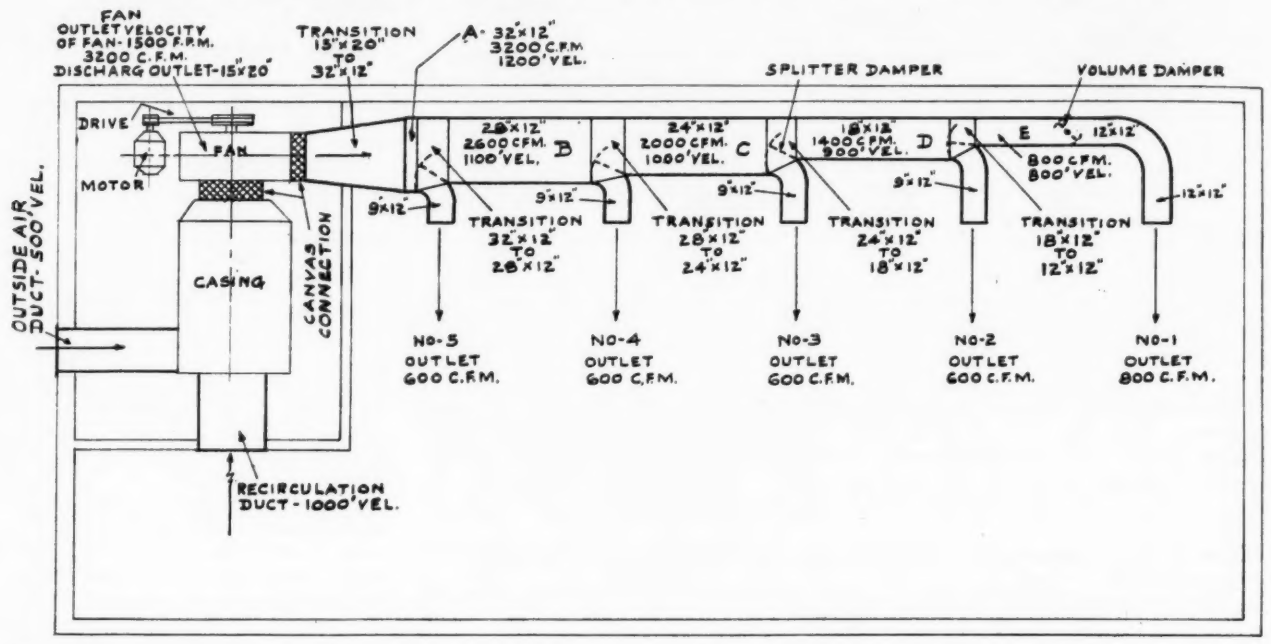

Fig. 5 shows a straight run duct system which has been sized by the velocity method, as explained in the text.

Joints Employed In Forming Sheet Metal Ducts

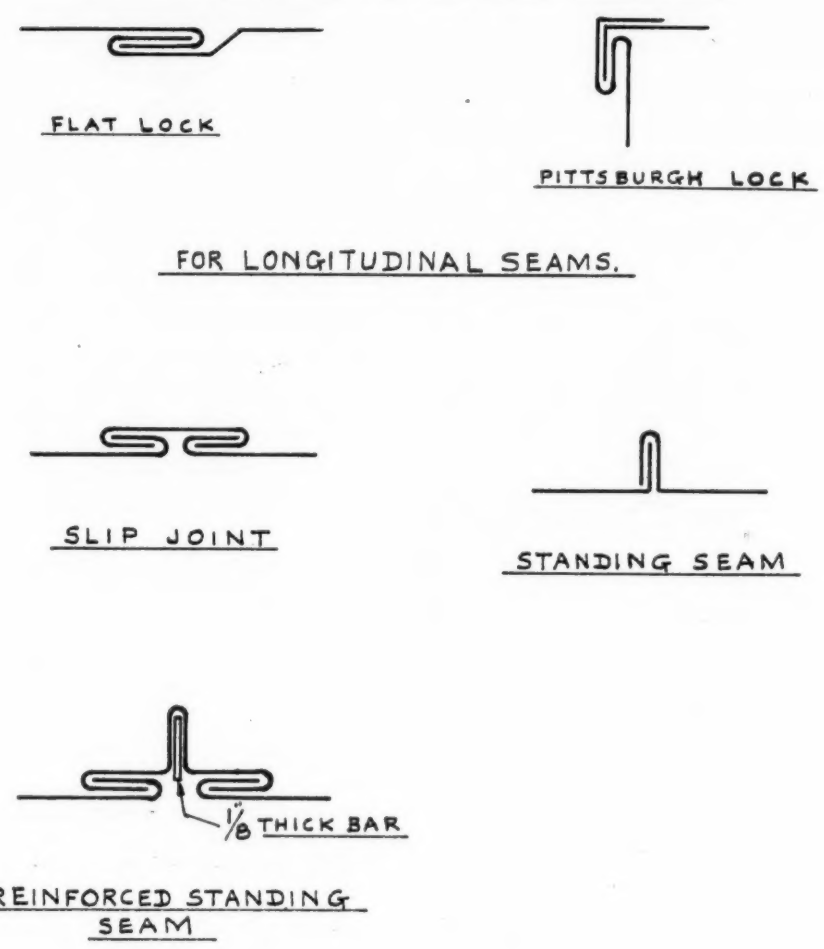

Fig. 4—Various types of seams used in ducts are illustrated above.

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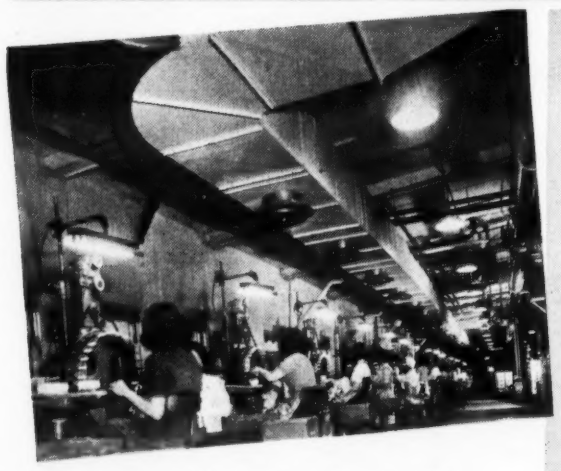

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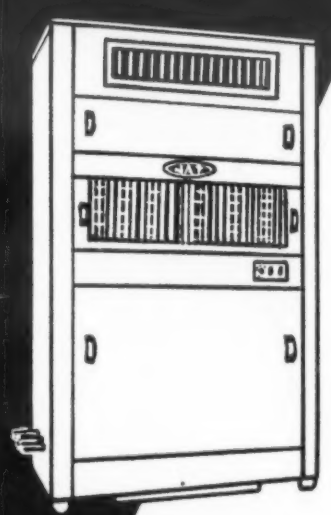

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2710 McGee Trafficway • Phone HA. 1892 • KANSAS CITY, MISSOURI
The Nat Corporation also manufactures the NAT Suspended Gas-Fired Unit Heater

Coast Conference--

(Concluded from Page 1, Column 4)

Conference and that companies which are acceptable under the rules for exhibiting should send in their applications to Rema headquarters, 1107 Clark Building, Pittsburgh, not later than April 10.

Exhibits will be open from 10 a.m. to 10 p.m. on Friday, April 30; from noon to 5 p.m. on Saturday, and noon to 6 p.m. on Sunday, May 2.

A special program of technical meetings is being set up by the California Chapter of R.S.E.S. to be announced soon. These technical meetings will be held on Saturday and Sunday mornings, May 1 and 2, from 9 a.m. to 12 noon.

Hotel reservations are being handled by Frank Dwyer, Chairman of the Housing Committee, c/o Palace Hotel, San Francisco, Calif., to whom reservations for rooms should be addressed.

Firms which have already made reservations for educational exhibits a week before the deadline include:

Airserco Mfg. Co., Inc., Alco Valve Co., Aminco Refrigeration Products Co., Ansul Chemical Co., Automatic Products Co., Bush Mfg. Co., Chicago Seal Co., Copeland Refrigeration Corp., Curtis Refrigerating Machine Division, Curtis Mfg. Co., Davison Chemical Co.

Detroit Lubricator Co., Dole Refrigerating Co., Ebco Mfg. Co., Electrimatic Division, Simoniz Co., Eston Chemicals, Inc., Fogel Refrigerator Co., Frigidaire Division, General Motors Corp., General Controls Co., L. H. Gilmer Co., Heat-X-Changer Co.

Henry Valve Co., Highside Chemicals Co., The Imperial Brass Mfg. Co., Jack & Heintz Precision Industries, Inc., Kason Hardware Corp., Kelvinator Division, Nash-Kelvinator Corp., Kerotest Mfg. Co., Kramer-Trenton Co., Lehigh Mfg. Co., Lynch Corp.

Mitchell Mfg. Co., Mueller Brass Co., H. A. Phillips & Co., Ranco Inc., Refrigeration Engineering, Inc., Servel, Inc., A. O. Smith Corp., Sporlan Valve Co., Standard Refrigeration Co.

Superior Valve & Fittings Co., Tecumseh Products Co., Temprite Products Corp., Ultra-Violet Products Inc., United Frigiuator Engineers, United Refrigerator Co.

Universal Cooler Division, International Detrola Corp., Virginia Smelting Co., Wabash Mfg. Co., Ward Refrigerator & Mfg. Co., The Weatherhead Co., Wolverine Tube Division.

Statistics Hit--

(Concluded from Page 1, Column 3)

Bureau's activity was cut from $882,000 to $380,000.

"It is self-evident that this sum is grossly insufficient to provide the country its only authentic information on the trend and composition of its nearly $120 billion worth of retail trade to say nothing of all wholesale trade activities in the United States," Rep. Gary told the House.

"This cut disregards the vital interests of hundreds of local chambers of commerce and national trade organizations which have joined with the Census Bureau in cooperative programs to establish accurate measures of the retail and wholesale trade which represent the marketing channels for almost the entire output of the farms and factories.

"The curtailments of the committee which affects business are by no means limited to manufacturing and distribution statistics. It also proposes a reduction in foreign trade and shipping statistics of about one-third at a time when the interest of Congress and business concerns is at an all-time high.

"To make matters worse, it is proposed to transfer the work from the Census Bureau to the Bureau of Foreign and Domestic Commerce, which by design does not possess the mechanical equipment and other necessary facilities."

Chattanooga Firm Gets Ballroom Cooling Job

CHATTANOOGA, Tenn. — J. W. Brooks & Sons, Chattanooga contractor, has begun installation of a $15,000 air conditioning unit for Hotel Patten ballroom. A 30-hp. compressor will be set up in the basement.

E.E.I. Conference Will Cover Many Subjects--

(Concluded from Page 1, Column 2)

power and heating, commercial sales, and farm sales.

Featured speaker at the final luncheon session on April 8 will be Charles E. Wilson, president of the General Electric Co. Wilson will speak on the "New Balance of Power."

Morning session of the residential sales section will be devoted to the electric kitchen with the discussion conducted by two utility representatives and one private company executive.

The detailed program follows:

GENERAL SESSIONS
Grand Ballroom

Presiding: Ralph P. Wagner, chairman, Commercial Division General Committee.

April 7—Morning Session

10 a.m.—Opening of the Conference, Ralph P. Wagner.

10:15 a.m.—"What Six Billion Dollars Means to Salesmen," Charles E. Oakes, president, Pennsylvania Power & Light Co.; president, Edison Electric Institute.

10:45 a.m.—"Interdependence—You Ain't Half Using What You've Got!" N. J. MacDonald, vice president, Thomas & Betts Co., Elizabeth, N. J.; chairman, NEMA Interdepedence Committee.

11:25 a.m.—"Long Range Growth—A Challenge to Utility Sales Forces," Walker L. Cisler, executive vice president, The Detroit Edison Co.

11:50 a.m.—"Back to Selling the Sizzle," Elmer Wheeler, president, Tested Selling Institute, New York City.

12:30 p.m.—Public Utilities Advertising Association Luncheon. Harold S. Metcalfe, president, PUAA. Speaker: "Three Acres To Harvest."

April 7—Afternoon Session

2 p.m.—Announcement of Prize Awards Contests and Presentation of 1947 Awards. H. M. Sawyer, chairman, EEI Prize Awards Committee; vice president, American Gas & Electric Service Corp.

2:15 p.m.—Presentation—"The Defense Rests."

April 8—Morning Session

10 a.m.—"Agriculture Is Big Business," Dr. J. O. Christianson, superintendent, School of Agriculture, University of Minnesota.

10:30 a.m.—"The Shape of Things to Come," F. T. Letchfield, consulting engineer & asst. vice president, Wells Fargo Bank & Union Trust Co.

11:00 a.m.—"The Means for the Financing of the Complete Home, Including Electric Facilities and Equipment," Horace Russell, General Counsel, U. S. Savings & Loan League, Chicago.

11:30 a.m.—"Salesmen's Compensation," J. C. Aspley, president, The Dartnell Corp., Chicago.

12:30 p.m.—Luncheon Session—Marine Dining Room. Speaker: C. E. Wilson, president, General Electric Co., "The New Balance of Power."

Residential Section
Grand Ballroom

April 6—Morning Session

Presiding: J. F. Burt, chairman, Electric Kitchen-Laundry Committee.

10 a.m.—Opening of the Conference, J. M. Stedman, chairman, Residential Section.

10:30 a.m.—"Kitchenizing—Of Course It's Electric," A New Electric Kitchen Program. H. H. Brenan, Pennsylvania Power & Light Co., T. O. McQuiston, Duquesne Light Co., Harry E. Warren, The Ralph H. Jones Co.

April 6—Afternoon Session

Presiding: J. M. Stedman, chairman, Residential Section.

2 p.m.—"The New Look in Home Making Education in Pennsylvania," Dr. A. Pauline Sanders, chief, Home Economics Education, Department of Public Instruction, Commonwealth of Pennsylvania.

2:45 p.m.—"How the Utilities Cooperate," L. R. Cole, West Penn Power Co.

3 p.m.—"Home Making Departments in California," H. C. Rice, Southern California Edison Co.

3:20 p.m.—"Teaching About Light and Sight," H. A. Stroud, chairman, Home Lighting Educational Committee, Better Light Better Sight Bureau.

3:40 p.m.—"Planned Lighting Goes Forward," Paul W. Clements, Columbus & Southern Ohio Electric Co.

Industrial Power and Heating Section
East Lounge

April 6—Morning Session

Presiding: Robert G. Ely, Public Service Electric & Gas Co., vice chairman, Industrial Power and Heating Section.

10 a.m.—Opening Remarks, J. R. Hartman, chairman, Industrial Power and Heating Section.

10:15 a.m.—"Relation of the Power Salesman to the Utility Problem," W. J. Beckjord, president, The Cincinnati Gas & Electric Co.

10:45 a.m.—"Prospects For Future Industrial Power Load," C. B. Stainback, Industrial Syndicate manager, Westinghouse Electric Corp.

11:15 a.m.—"Super, Stupendous, Colossal Selling," F. McQuillin, West Penn Power Co.

April 6—Afternoon Session

Presiding: J. R. Hartman, The Cincinnati Gas & Electric Co., chairman, Industrial Power and Heating Section.

2:15 p.m. "Help Wanted! A Philosophy For Selling Industrial Power," C. A. Kells, managing director and secretary, Electric Industrial Truck Association.

2:45 p.m.—"Improved Handling Methods—An Answer to Industry's Rising Production Costs," F. W. McChesney, Industrial Divisions, General Electric Co.

3:15 p.m.—"Industrial Development and What It Means to an Electric Utility," D. C. McKee, Empire District Electric Co.

3:45 p.m.—"Customer Relations—Or, How to Get Along With Your Customers," H. J. Cupper, assistant to the vice president, General Engine Group, General Motors Corp.

Commercial Sales Section
West Lounge

April 6—Morning Session

Presiding: H. B. Gould, Ohio Edison Co., chairman, Commercial Lighting Committee.

10 a.m.—Opening of the Conference. J. S. Schuchert, Duquesne Light Co., chairman, Commercial Sales Section.

10:15 a.m.—"Commercial Sales, Unlimited," P. M. Alden, Philadelphia Electric Co.

10:45 a.m.—"Commercial Aspects of Television," Paul L. Chamberlain, manager of sales, receiver division, electronics department, General Electric Co.

11:15 a.m.—"Who Does 'What' About Street Lighting," E. C. Huerkamp, sales manager, lighting division, Westinghouse Electric Corp., Bruce Jensen, Public Service Electric & Gas Co.

April 6—Afternoon Session

Presiding: Bruce Jensen, Public Service Electric & Gas Co.

2:15 p.m.—"I Tried It and It Worked!" Paul Manchester, Blackstone Valley Gas & Electric Co., C. D. Hollister, New York Power & Light Corp.

3 p.m.—"Thar's Gold in Commercial Lode," David W. Grosshandler, sales manager, commercial counter appliances, Hotpoint, Inc.

Farm Section
Michigan Room

Presiding: E. C. Easter, chairman, Farm Section.

April 6—Morning Session

9:30 a.m.—Opening of the Conference. Summary of Activities and Accomplishments of Farm Section During Preceding Year. E. C. Easter, Alabama Power Co.

9:45 a.m.—In-Service Training Program For Agricultural Workers," "Plans and objectives For Michigan," Prof. D. E. Wiant, agricultural engineering dept., Michigan State College, East Lansing, Mich. "As Conducted by Washington Water Power Company," A. G. Mayer, Washington Water Power Co. Discussion: Russell H. Gist, agricultural extension service, Morgantown, W. Va.

10:30 a.m.—"Farm Electrification Manual —Its Status and Use," John L. Burgan, New York State Electric & Gas Corp.

10:45 a.m.—Recess.

11:00 a.m.—"Promoting, Selling and Servicing Water Systems," M. B. MacNeille, manager, pump division, A. G. McDonald Mfg. Co., Dubuque, Iowa.

11:20—Discussion: J. C. Cahill, The Detroit Edison Co.

11:30 a.m.—"Building Revenue and Customer Satisfaction," George Rietz, president, ASAE, manager, farm industry division, General Electric Co., Schenectady, N. Y.

12 noon—Farm Section Luncheon—South Dining Room. Speaker: Allan B. Kline, president, American Farm Bureau Federation, Chicago. Subject: "You, Too, Are Interested in a Prosperous Agriculture."

April 6—Afternoon Session

2:30 p.m.—"Organization and procedure For Conducting the Agricultural Development Program," Fred M. Shaw, Texas Power & Light Co., J. B. Stere, West Penn Power Co., Neil Bolton, Tide Water Power Co. Discussion: E. J. Gildehaus, Union Electric Co. of Missouri.

3:30 p.m.—"Community Development and the Perpetuation of the Private Enterprise System," Roy W. Godley, agricultural consultant, The Kroger Co., Cincinnati, Ohio.

4 p.m.—"Planning for the Future in Farm Electrification and Agricultural development," C. E. Seitz, head, agricultural engineering department, Virginia Polytechnic Institute, Blacksburg, Va.

4:45 p.m.—Summary of the Meeting and EEI Farm Electrification Activities.

U.S. Report Shows--

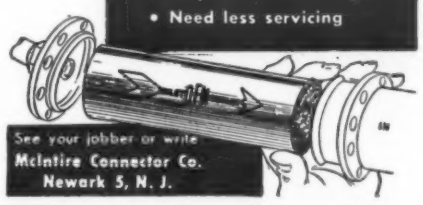
(Concluded from Page 1, Column 5)

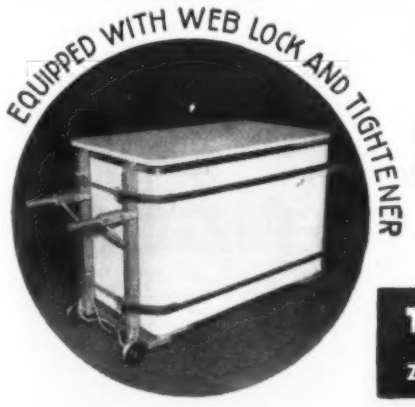
this January as compared to last year. They were the only group in the electrical wholesalers category to report a decline. As a whole, electrical goods wholesalers' sales estimated at $260,000,000 in January, were 31% above January, 1947, but far below the record $369,000,000 chalked up in December.

Inventories were estimated at 43% over January, 1947, and even 6% higher than in December. At the present rate of sales, these equalled about seven weeks of business, according to the Bureau. Compared with sales, inventories were at about the same ratio as they were in January last year and in January, 1939.

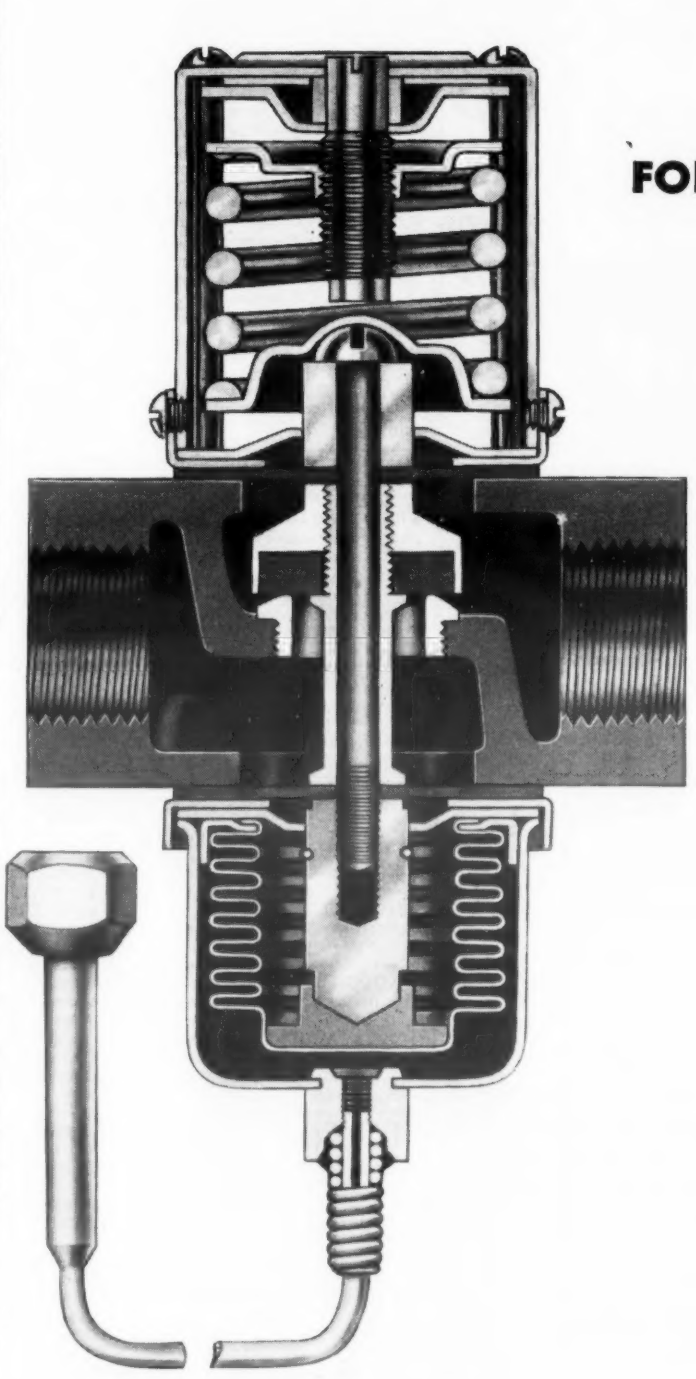
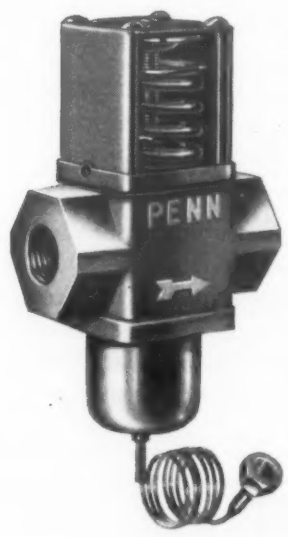
Turning over once every 36 days, accounts receivable were also at the same level as last year, the Bureau said. Among appliance specialty outlets, the turn over rate was approximately a week shorter than for the rest of the electrical industry. This is considered to be normal.

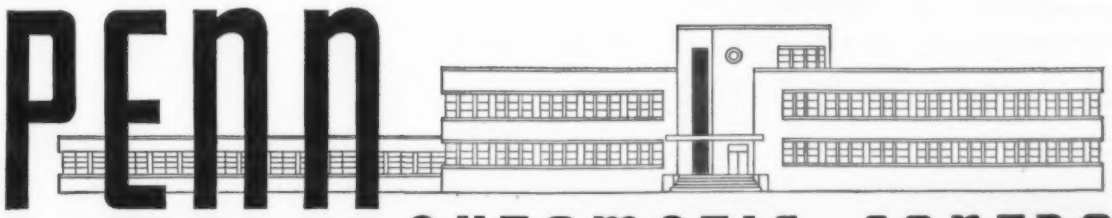
Factory sales of mechanical stokers, numbering 2,669 in January, had slipped 2% below December, more than 33% below January, 1947.

GREATER CAPACITY DFN DEHYDRATORS
• Stay on the line longer
• Need less servicing

See your jobber or write
McIntire Connector Co.
Newark 5, N. J.



Are You Looking for An Easy Way to Handle Stoves, Refrigerators and Freezers?
Solve Your Problem with the New
ROLL-OR-KARI Dual Trucks
Patented Step-On-Lift • Folding Handles
Capacity 1000 Lbs. • Shipping Weight 40 Lbs.
WRITE TODAY
THE ROLL-OR-KARI CO.
MANUFACTURERS
ZUMBROTA • MINNESOTA

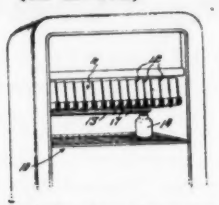
Switch to PENN
FOR BETTER WATER VALVES

They're naturals for *easy installation—long life—dependable performance*—because of their unique and simplified design.
Water flows only through the center section and can never reach valve spring, bellows or sliding parts. PENN Water Valves keep free of rust and sediment so there's no premature wear. They stay sensitive to changes in refrigerant head pressure. Sticking seats and water hammer are eliminated. There's no need to drain in winter as freezing doesn't hurt this valve.
Built in flanged or threaded styles and in sizes from 3/8" to 2-1/2". Ask your wholesaler for complete details or write to **Penn Electric Switch Co., Goshen, Indiana.** Export Division: 13 E. 40th St., New York 16. In Canada: Penn Controls, Ltd., Toronto, Ont.


PENN

AUTOMATIC CONTROLS
FOR HEATING, REFRIGERATION, AIR CONDITIONING, ENGINES, PUMPS AND AIR COMPRESSORS

PATENTS

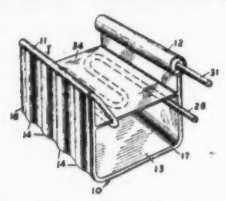
Week of January 6

2,433,825. HEAT TRANSFER DEVICE WITH CAPILLARY CONDENSATE DRAIN. Alvin O. Brothers, Evansville, Ind., assignor to Servel, Inc., New York, N. Y., a corporation of Delaware. Application July 1, 1944, Serial No. 543,088. 13 Claims. (Cl. 62—103.)



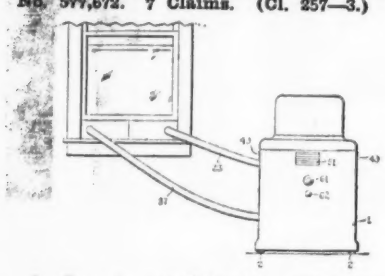
1. A self-draining heat transfer fin comprising a relatively flat member provided with capillary passages along the lower margins thereof for conveying condensed moisture therefrom.

2,433,951. REFRIGERATOR EVAPORATOR. Charles E. Hickman, Adrian, Mich. Application May 18, 1946, Serial No. 670,742. 18 Claims. (Cl. 62—126.)



1. In an evaporator of the type in which the main body is formed by a unitary plate having a plurality of conduits formed therein, each end of each conduit being in communication with a header, the improvement which comprises: a flat surface extending across the width of said unitary plate, a header having a flat face engaging said flat surface, said flat surface and flat face being brazed together, the header having a groove adapted to hold brazing material prior to the brazing operation.

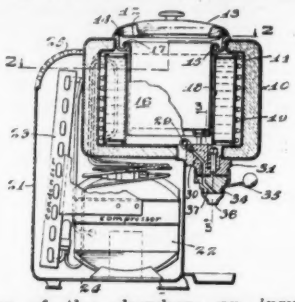
2,433,960. AIR CONDITIONING APPARATUS. Robert S. Sherman, Lynn, Mass. Application Feb. 13, 1945, Serial No. 577,672. 7 Claims. (Cl. 257—3.)



1. In air conditioning apparatus, in combination, a refrigerating unit having heat-absorbing elements and heat-developing elements, a first fan means for circulating over the heat-absorbing elements the air being conditioned to effect the condensing of water vapor to liquid water from and the cooling of the said air being conditioned, reservoir means effecting heat-exchanging relation between the said liquid water and the heat-developing elements, a foraminous element within the said reservoir means and submerged in the liquid water therein, a second fan means for circulating over the heat-developing elements and through the foraminous element to evaporate the liquid water within the said reservoir means air drawn from the atmosphere at a location remote from the air being conditioned and for discharging such circulated air thus water-laden into the atmosphere at another location remote from the air being conditioned.

2,433,977. LIQUID COOLING APPARATUS. George K. Bently, Kendallville, Ind., assignor to McCray Refrigerator Co., Kendallville, Ind., a corporation of Indiana. Application July 11, 1945, Serial No. 604,314. 1 Claim. (Cl. 62—141.)

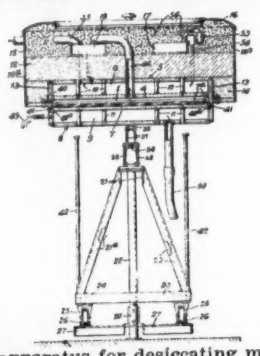
In a liquid cooling apparatus, a refrigerating system of the type including a compressor, a condenser and an evaporator; a hollow casing substantially L-shaped in vertical section defining a chamber and a shelf like seat, one portion of the chamber being of greater vertical dimension than the remainder of the chamber, and the cross-sectional area of the said one portion of the chamber taken on a horizontal plane being of lesser dimension than the cross-sectional area of the remainder of the chamber, said compressor and condenser being positioned in the hollow casing, the condenser being located mainly within said one portion of the chamber and the compressor being located mainly within the remainder of the chamber; an insulated shell forming a liquid cooling chamber supported upon the shelf like seat of the casing, said insulated shell having a portion extending outwardly from and in overhanging relation to said remainder of the chamber, said insulated shell containing the evaporator of the refrigerating system.



2,433,981. VENTILATING AIR DISTRIBUTOR. Everett S. Buck, Fort Wayne, Ind. Application April 22, 1944, Serial No. 532,371. 11 Claims. (Cl. 98—40.)

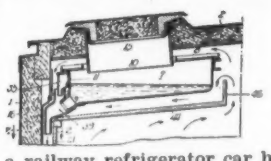
1. In an air outlet fitting adapted to be applied to an air duct neck having an outlet, the combination of a stationary support mounted adjacent to said duct neck and having a lower edge, a distributor in the form of a pyramid having lateral faces, means for adjustably mounting said distributor on said support, transversely and in spaced relation with respect to said duct neck outlet, and a plurality of dampers mounted for pivoting about one edge on the lower edge of said support for movement toward and away from the lateral faces of said distributor, said dampers completely surrounding said duct neck.

2,434,003. VACUUM DESICCATING APPARATUS USING THE EVAPORATOR AND CONDENSER OF A REFRIGERATING DEVICE. Willard L. Morrison, Lake Forest, Ill. Application Dec. 21, 1942, Serial No. 469,671. 4 Claims. (Cl. 34—76.)



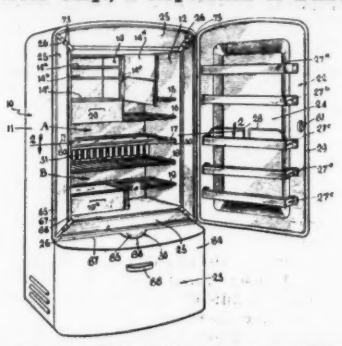
1. An apparatus for desiccating materials comprising a hermetically sealed receiving chamber for the material to be treated, having an upper wall and a lower wall with a space between them to be partially filled with the material to be treated, the upper wall being formed by an evaporator of a mechanical refrigerating device and the lower wall being formed by the condenser of a mechanical refrigerating device, said mechanical refrigerating device including a compressor adapted to move a refrigerant through said condenser and said evaporator, and means for withdrawing air from the receiving chamber.

2,434,062. REFRIGERANT TANK FOR REFRIGERATOR CARS. Edwin R. Battley and George E. McCoy, Montreal, Quebec, Canada. Application March 17, 1945, Serial No. 583,354. 7 Claims. (Cl. 62—17.)



1. In a railway refrigerator car having a roof, a wall, a flue forming part of said wall, a liquid refrigerant container adjacent said roof and provided with overflow and drain openings; a duct communicating with said overflow and drain openings and said flue to conduct liquid from said overflow and drain openings directly into said flue.

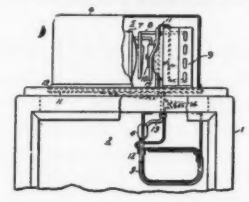
2,434,117. SHELF STRUCTURE WITH GUARD FOR REFRIGERATOR DOORS. Roland H. Money, Mount Healthy, and John W. Craig, Cincinnati, Ohio, assignors, to Avco Corp., a corporation of Delaware.



1. In a refrigerator door construction having a recessed portion interiorally thereof, and having a storage shelf disposed partially within said recessed portion, said shelf comprising a bottom and a rail thereabove, a retaining guard of greater height in upright position than the rail secured to and pivoted on the self bottom adjacent said rail whereby said guard may be moved about its pivots to upright position against said rail to provide a second retaining means disposed above the rail for retaining articles.

2,434,118. RESTRICTOR TUBE FOR REFRIGERATING SYSTEMS. Delbert F. Newman, Schenectady, N. Y., assignor to General Electric Co.

1. In a refrigerating system having high pressure and low pressure sides and including a refrigerant evaporating unit and a refrigerant liquefying unit connected in a closed circuit, said evaporating unit and said liquefying unit being on the low and the high pressure sides respectively of said system, a restrictor tube in said circuit separating said high and said low pressure sides for controlling the flow of refrigerant from said liquefying unit to said evaporating unit, the pressure drop through said tube during normal operation of said system being such that the temperature of refrigerant flowing through said tube falls below the freezing point of water in the tube before being discharged therefrom, said tube including a first section comprising the major portion of the length of said tube and a second section of increased cross sectional area,



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POSITIONS WANTED

AIR CONDITIONING commercial refrigeration installation and serviceman, 12 years experience, "F-12" and M. C. Qualified to manage, supervise or instruct. Desire position with manufacturer or distributor. Age 37, married, will furnish best of references, own car and will travel. LEO E. McKEE, 1619, Leer Street, South Bend 14, Indiana.

DO YOU have a help problem? Let us solve yours. Available—well trained selective men. These men have completed a course of 34 weeks consisting of practical shop refrigeration. Send for our records. Well trained men for a good job. Available for all parts of the country. THE ST. LOUIS SCHOOL FOR ELECTRICITY AND REFRIGERATION, INC., 6767 Southwest Avenue, St. Louis, 17, Mo.

SALES ENGINEER college graduate, 15 years experience in commercial condensing unit packaged and central type air conditioning unit, desires sales promotion position in Southern California, where he has good contacts and experience. Excellent references. BOX 2745 Air Conditioning & Refrigeration News.

SALES ENGINEER, 12 years experience in air conditioning and commercial refrigeration desires sales or engineering work with reliable firm in or around Los Angeles. Capable of laying out own jobs and helping with installation. Best references. BOX 2746 Air Conditioning & Refrigeration News.

MANUFACTURER'S SALESMAN: Age 41. Highly experienced in the sales, service, and installation of equipment as commercial refrigeration, air conditioning, heat transfer equipment, oil burners, pumps, and fans. Free to travel. Highest type of reference and proven record. Information gladly exchanged or will call for interview. Salary plus commission preferred. Reply to JOHN W. IRWIN, Columbia Furnace, Virginia, Shenandoah County.

POSITIONS AVAILABLE

SALESMAN WANTED: Successful men with a following among refrigeration parts wholesalers are invited to represent us to sell our Cee Kleer Sight Drier. Exclusive territories still available. Write us, giving experience, lines handled and territories covered. B & W SALES COMPANY, 49 Central Ave., Cincinnati 2, Ohio.

COMMERCIAL AND industrial refrigeration and air conditioning installation and servicemen with at least 3 years experience. 40 hour week, company trucks furnished. $1.80 to $2.00 scale. DRESCO REFRIGERATION COMPANY, 4404 Woodward, Detroit 1, Michigan.

EXPERIENCED COMMERCIAL salesmen for York self-contained air conditioners and York commercial full line. Earnings $5,000 to $10,000. Must have car. All Northern New Jersey. Apply or write: ELECTRIC PRODUCTS, INC., York Distributors, 106-112 Nelson Ave., Jersey City, New Jersey.

FACTORY REPRESENTATIVES wanted by manufacturer of nationally advertised line of Electric Water coolers. Choice territories available. Write stating qualifications, dealer and distributor contacts. BOX 2737 Air Conditioning & Refrigeration News.

WELL ESTABLISHED Metropolitan New York refrigeration supplies jobber has opening for experienced salesman with following. Write full details and qualifications in first letter. Salary will be kept confidential. BOX 2744 Air Conditioning & Refrigeration News.

FIELD SERVICE Representative wanted by large Midwest appliance manufacturer. Former distributor service manager or person with field service experience. Free to travel small territories. This is an excellent opportunity with unlimited possibilities for advancement. Write, stating complete history, references, background and experience. Replies held confidential. BOX 2747 Air Conditioning & Refrigeration News.

COMMERCIAL REFRIGERATION Serviceman—For aggressive sales and service company located in Northern Ohio. Experience in commercial and air conditioning. Union wages. BOX 2750 Air Conditioning & Refrigeration News.

SALESMEN—FOR aggressive sales organization located in Northern Ohio. Experience in air conditioning and commercial refrigeration. Salary and commission. Excellent opportunity. Our men know of this ad. State previous experience. BOX 2754, Air Conditioning & Refrigeration News.

REFRIGERATION ENGINEER: Nationally known refrigeration manufacturer looking for refrigeration, mechanical, or electrical engineer with about five years experience in refrigeration design and development. Will pay salary commensurate with ability. Write full details of qualifications, experience, and salary expected. Enclose photos. Write BOX 2755, Air Conditioning & Refrigeration News.

FIELD ENGINEER: Control manufacturer requires a high-grade engineer with refrigeration and air conditioning experience. Require man with home established in Chicago or suburbs. BOX 2756, Air Conditioning & Refrigeration News.

SOUTH AMERICAN distributor for nationally known manufacturer of air conditioning and refrigeration equipment has an opening for a well qualified sales engineer having had experience in design, layout and erection of ammonia and "Freon" refrigeration and air conditioning systems. Must organize office and service procedure. Permanent residence abroad. Good salary and bonus. Write, stating qualifications and previous experience. BOX 2751, Air Conditioning & Refrigeration News.

MANUFACTURER'S AGENTS: Have several territories open needing some honest effort with wholesalers and dealers to provide profitable returns. Only hard working salesmen apply. Sales to manufacturers and wholesalers. Commission on all sales in territory assigned. Non-competing lines permitted. Once established, repeat business plentiful. Commission only. Advise territory covered and lines carried. BOX 2757, Air Conditioning & Refrigeration News.

EQUIPMENT FOR SALE

40 TON CARRIER air conditioning unit model 3909, vertical floor type, complete with 6 row "Freon" coil and self-contained model S7G66-200W condensing unit with two compressor bodies. Complete with motors and compressor controls. JOS. BEHR AND SONS, INC., 1142 Seminary St., Rockford, Illinois.

SEALED UNITS rebuilt and exchanged. Prompt service on Coldspot (sealed & semi-sealed) Chieftain, Gale, Tecumseh, Norge and many others. One year guarantee. Write for price list and shipping instructions. BRIGHTON, 16640 Log Cabin, Detroit 3, Mich.

FOR SALE Buffalo blower, type "CL," limit load, class 1, size No. 7, Ser. No. A97055. Like new. Price $325.00. J. P. DAVENPORT, 126 N. Galt Ave., Louisville 6, Ky., Phone: Taylor 5938.

HERMETIC UNITS rebuilt: Westinghouse, Norge, Frigidaire, Kelvinator, Crosley, Philco, and G. E. (except Monitor top). One year guarantee, $35.00 F.O.B. No relays or controls included. DOLL & LEWIS, INC., 2331 Frederick Ave., Baltimore 23, Maryland.

NEW GENERAL Electric motors, 1½ HP. 1800 R.P.M. 230 volts 1 Ph. 60 cycle. High starting torque. Constant duty sleeve bearing. List $88 less 20%. Also in stock ⅛ to 1 HP. EDISON COOLING CORP., 310 East 149th St., New York City, N. Y.

QUALITY BOBTAIL fountains; reach-ins walk-in boxes—wood, metal; dough retarders; double duty cases—stainless steel, porcelain; dairy, florist, bakery cases; ice cream hardening cabinets; thermopane frozen food cases; milk, sandwich coolers; stainless steel back bars; with machines. Equipment made to special order. FRIGITEMP CORP., 931 Berger St., Brooklyn 16. MA 2-9093.

SECOND HAND refrigerators, all makes and models for immediate delivery. HANTOBER & CO., INC., 200 E. Church Lane, Philadelphia 44, Pa.

FOR SALE at reduced prices, 2-tap all stainless steel direct draw boxes complete with blowercoil $275 F.O.B. Chicago, Illinois. 3-tap all stainless steel direct draw boxes complete $340. GEORGE HILGER CO. INC., 8444 So. Racine, Chicago, Illinois.

FOR SALE two (2) 5 ton second hand Chrysler high and low sides air conditioners complete. Bids acceptable at the KOOLERAIRE CONDITIONING COMPANY, 55 West 42nd Street, New York, N. Y.

JACK & HEINTZ fractional horsepower motors. Complete line of various sizes: ⅛, ¼, ⅓, ½-110/220 AC 60 cycles; 115/230 AC 50 cycles. Available for immediate delivery. Maximum discounts. Export Dept., S. J. O'BRIEN SALES CORP., 560 West 34th Street, New York 1, N. Y Telephone WI. 7-2100.

ELECTRIC WATER coolers. Bottle type, used, in good running condition. Standard make. Attractively priced. One to ten, $50.00 each. Ten or more, $45.00 each. Twenty-five or more $40.00 each. F.O.B. your plant. HINCKLEY & SCHMITT, 420 W. Ontario St., Chicago 10, Illinois.

3 HP CARRIERS $310. 5 HP Mills $395. 50 HP Schnacke less motor $1195. 5 HP McQuay & Typhoon Weathermakers $395. ¾ & 1 HP Amco Weathermakers $175 & $195. 15 HP Larkin Evaporative Condenser $795. The following less motors: ½ HP Crew & ¼ HP Copeland units $39 each; ⅓ HP Universals $49 each. All new crated. PILGRIM REFRIGERATION CO., 48-20 43rd Ave., L. I. City, N. Y.

FOR SALE: Immediate delivery. New. Attractive price. 1 8⅝" x 10' Dry Ex Cooler with "B" baffles & steel tubes. Complete with insulation. If interested, write for price and further details. JOHNNIE RUSH'S, 721 Bolton Avenue, Alexandria 3, Louisiana.

KOLD-HOLD PLATES (18" x 60"). Manufacturer's surplus. Three hundred and ninety-three (393) at $8.00 each. UNITED REFRIGERATOR COMPANY, St. Paul 1, Minn.

ZERO-PLATE COMBINATION draft and bottle beer cooler. Capacity, two kegs and 36 cases. Complete with draft arms, counter top and foot rail. List price $1460.00 with ¾ unit. Special price $500.00 less unit. This is the fastest dry cooler on the market. ROYAL REFRIGERATION COMPANY, 5812 West Pico Blvd., Los Angeles, California.

SEALED CROSLEY terminals. Installed from the outside in a few minutes without opening the compressor or removing unit. No special tools needed. Stops leaky terminals on "F-12" units. Part # 1020 short model—for short Crosley terminals ("F-12" compressors with 4 mounting legs.) Part #1020 long model for long Crosley terminals ("F-12" compressors with 3 mounting legs). $5.25 set of three. Immediate delivery. Money-back guarantee. SEALED UNIT PARTS CO., 3079 Third Ave., New York 56, N. Y.

TUBING: LIQUIDATING 60,000' of ½" O.D. Type L open end tubing. All in original crating, at the exceptionally low price of $.0825 per foot f.o.b. Indianapolis, Indiana. SHUTTLEWORTH CONDITIONED AIR CO., INC., 117 East Michigan Street, Indianapolis 4, Indiana.

COMPLETE SEALED units ⅛ H.P. for sale. Condensers are fan cooled. Complete with relay and charging valves $45.00. Lots of 10, $40.00 each. F.O.B. New York. Dimensions are 15¾" long, 14½" wide, 11" high. TECHNICAL REFRIGERATION SPECIALIST'S, 362 East 180th Street, Bronx, N. Y.

(1) 4⅛" O.D. Kerotest copper-to-copper straight-through suction shut-off valve. TIDMARSH ENGINEERING COMPANY, P. O. Box 2425, Tucson, Arizona.

REBUILT HOUSEHOLD refrigerator equipment. Evapors. $3.00. 8" pulleys, $.90. Relays, $2.00. Thermal switches, $2.50. Radiators, $4.00. Guaranteed 18 mo., money back. C.O.D. Rewound stators for monitor type G.E., $3.50. Will buy equipment that can be put in good shape. Est. 1905. WALDRON ELECTRIC CO., Greenville, Pa., R #1.

EQUIPMENT WANTED

WANT TO buy one tubular ice plant, less compressor, about 10 ton capacity, new or used. BOX 2758, Air Conditioning & Refrigeration News.

BUSINESS OPPORTUNITIES

FOR SALE: Because of health, would like to sell small commercial & industrial refrigeration sales & service business in small Indiana city. Nice shop and show room with good lease. Quality franchises for both commercial and domestic equipment. BOX 2752, Air Conditioning & Refrigeration News.

SERVICE ENGINEERS' dream. For sale, at low cost, a small established commercial refrigeration sales and service shop. Central Arizona area, long hot seasons, very mild winters. Metropolitan pop. over 200,000. Low overhead. Fine setup for good man needing to move West for health. BOX 2753, Air Conditioning & Refrigeration News.

ICE PLANTS
3 to 80 ton Capacity. Freon or Ammonia. Diesel or Electric. Available with Air Agitation Equipment for Clear Ice & Ice Storage Room Equipment. 120 Day Delivery.

BULK ICE MAKERS
250 to 2000 lb. capacity Electric Motor, Gasoline or Diesel Engine Driven Units. Prompt Delivery.

ICE PLANT SUPPLIES
Ice Dumpers & Fillers, Brine Agitators, Tank Framing & Covers, Ice Tanks, Coils, Brine Coolers.

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LACK OF STATISTICS CAN HAMPER INDUSTRY

Weber Showcase & Fixture Co., Inc.
5700 Avalon Boulevard
Los Angeles, Calif.

Editor:

The Feb. 9 editorial in AIR CONDITIONING & REFRIGERATION NEWS, headed "Without Adequate Statistics We All Work In the Dark," is most timely. It recognizes a real and growing need.

To intelligently plan a future of any company, a substantial amount of statistics on the industry is absolutely essential. We have recognized that need and, lacking sufficient data through any central source, have established a Market and Research Department which is guiding our entire program. Although information is being garnered from every known source, it is still wholly inadequate, and I trust that your campaign to find better means of supplying such information is successful.

We subscribe to your thoughts, and are anxious to be cooperative.

H. M. BRUNDAGE, Vice President

BOOK HELPS SALESMEN GET TWO FEET IN DOOR

L. F. Beers Co., Inc.
150 Broad St.
Rochester, N. Y.

Editor:

Your permission is requested to reproduce in whole or part the editorial "Waistlines Will Be Leaner in 1948 for People Who Don't Own Home Freezers." We plan to distribute these to salesmen, dealers, and freezer prospects.

Your articles and editorials on freezers and freezing are especially timely, interesting, meaty, and valuable.

I might add, too, that Mr. Taubeneck's "One Foot in the Door" will help the alert businessman or salesman to get both feet in and to get the order.

DOUGLAS D. BEERS

MFR. MUST SELL DEALER AS WELL AS CONSUMER

Brunner Mfg. Co.
Utica, N. Y.

Editor:

In the Feb. 16 issue under the heading "Local Versus National Reputation," wouldn't it have been a fine thing if, in the case of the paint, the paint manufacturer had done as good a job of selling the dealer as he had done on selling the consumer in the first place?

It is a little hard to conceive why the two shouldn't go together.

O. R. MCDONALD,
Sales Promotion Manager

PLEASE DON'T CRITICIZE OUR FREE ENTERPRISE

Gary, Ind.

Editor:

In reading through your publication I note you have an "Off the Chest" department.

I enclose a poem which gets something off my chest.

ETHEL S. KIRTLAND

It's A Free Country—Yet

To finance and run a business isn't
easy as it looks.
The know-how to make jobs for men
is not all found in books.
Quoting from an article I read the
other day—
"The Union says Big Business socks
a lot of dough away;
"And Business says, to raise the
wage will mean a price increase."
Does anyone believe that this old
argument will cease?
No matter who gives in to whom,
'twill always be the same,
The man who has the capital must
always take the blame.
No rules we need from Washington
which bind the business man
And drive him nuts, so he can't
make a single future plan.

When the union man goes home at
night his time is all his own;
The boss is lucky if he isn't sitting
all alone
Figuring out the many things which
keep the wheels greased
So all his men will get the pay-
increased or not increased.
Sales must be pushed, and taxes
paid—expansion and repairs;
And if he really makes the grade
and attends to his affairs,
He deserves a lot of credit, for no
eight-hour day is his.
So often have I pondered long and
wondered why it is
That the union man who feels he isn't
earning enough pelf
Doesn't start a little business and
become the boss himself!

ETHEL SCHWARTZ KIRTLAND

FIRM SETS UP SPECIAL LIBRARY FOR SALES DEPT.

The Moock Electric Supply Co.
Youngstown, Ohio

Editor:

Not only have I enjoyed hearing you speak on numerous occasions, but have been delighted with your latest book "One Foot in the Door."

Your style, directness and clear simplicity for new, as well as old salesmen, is truly worth ten times the cost.

We are making it a must for all our new and old salesmen—plus office personnel connected with sales.

We are setting up a new library for our sales people and a letter listing your sugestions in this "New Selling Age" will be deeply appreciated.

We now have your books such as "Great Day Coming" and "Their Heads Shall Rise Again."

G. P. MACFARLAN,
Branch Manager

OOPS! IT SHOULD HAVE READ 'DISCHARGE VALVE'

Canadian Refrigeration Journal
137 Wellington St., West
Toronto, Ont., Canada

Editor:

I was just looking over the March 8 issue of the NEWS and on page 11 became interested in the article covering George Clark's talk at Cleveland on "Good Leak Detection." Something is wrong here. Either George Clark has been wrongly reported or he has made a mistake.

In paragraphs 3, 4, and 5, column 1, page 11, it goes on to explain the evacuation method and suggests a 20 in. vacuum be drawn on the system and then run a tube from the suction service valve to a glass of oil.

To quote your report,

"When this vacuum is reached, a tube from a gauge connected to the suction service valve is placed in a glass of oil so that any air drawn into the system through leaks will cause bubbles to rise to the surface of the oil."

This is a physical impossibility because just as soon as the line is cracked between the glass of oil and the 20 in. of vacuum on the system, the oil is immediately drawn into the system. As a matter of fact this is a safe and approved method of adding small quantities of oil to a compressor.

We suspect that George said, "connect the two from the *discharge* service valve."

H. S. PARISH,
Editor

Answer: It was our error, and as Harry Parish points out, should have read "discharge" instead of "suction" valve.

EDITORIAL AIDS THE INDEPENDENT DEALER

McCarty Brothers Equipment Corp.
7801-11 Lake St.
River Forest, Ill.

Editor:

We enjoyed your article, "Chain Stores vs. Chain Sales," in your issue dated Feb. 16, 1948, and feel that our salesmen should carry a copy to show independent merchants. Could you send us a dozen reprints of the article?

THOMAS J. CLEARY,
Sales Manager

WATCHING INVENTORIES BECOMES IMPERATIVE

Jones Refrigeration Inc.
New Orleans, La.

Editor:

Would like very much to compliment you on your editorial in the March 1 issue entitled "Warning To All Dealers; Watch Your Inventory." This article was exceptionally well written and packed full of power. It clearly showed who wrote this article really knows the business.

MARTIN L. JONES, President

COULD HOT 'NEWS' ARTICLE HAVE STARTED A FIRE?

Temperature Control Service
Waupaca, Wis.

Editor:

Haven't received the NEWS for Feb. 23. Learned that a carload of mail for here was burned Monday night. My copy of the NEWS was probably in that mail.

RAY NEAL

P. S.: I wonder if one of your editorials started that fire.

AMERICAN CREED NEEDS TO BE SUMMARIZED OFTEN

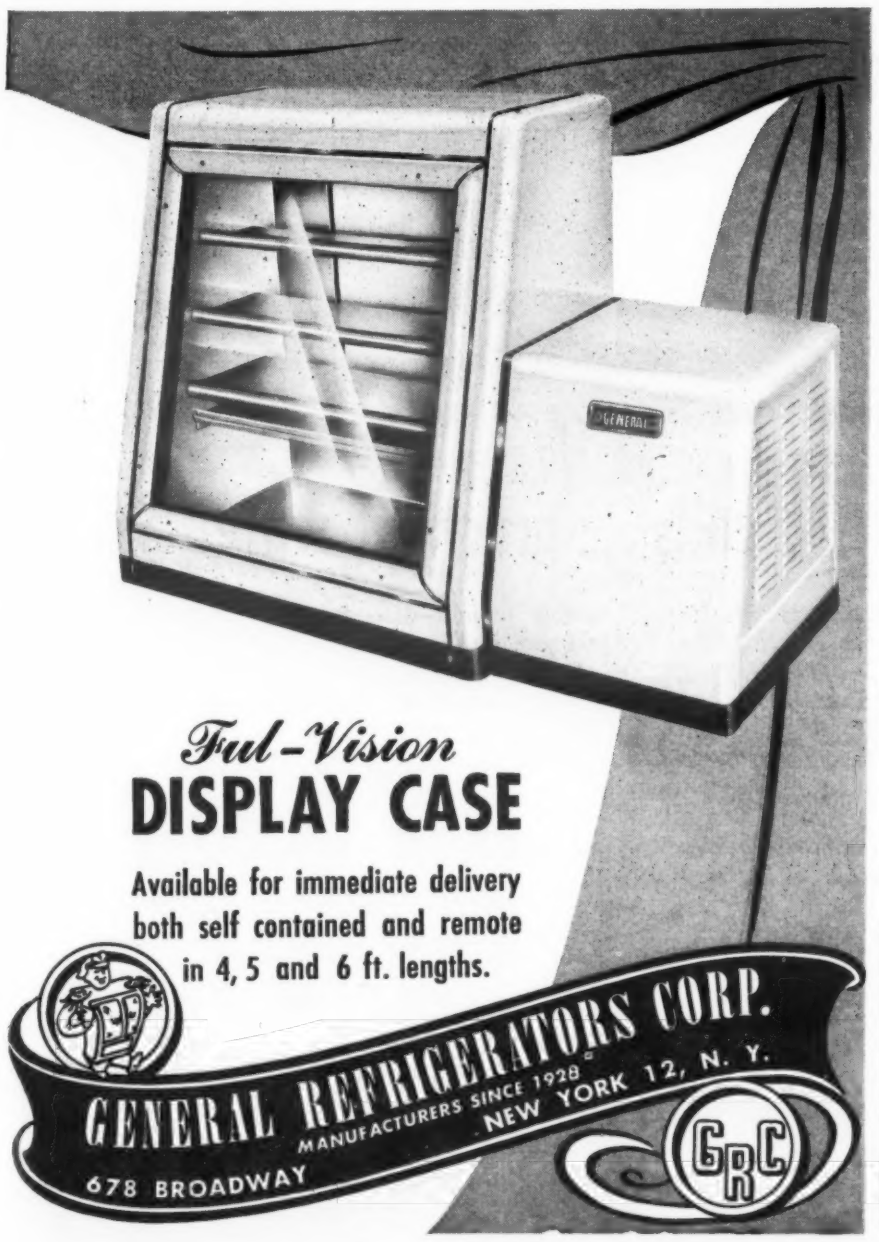
Flakice Corp.
Brooklyn 2, N. Y.

Editor:

May I congratulate you upon your editorial "They Can't 'Reform' Us," appearing in the March 8, 1948, issue of the NEWS.

It is the best summary of the American creed that I have ever read. More power to you and more editorials of that kind, please!

CROSBY FIELD, President



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both self contained and remote
in 4, 5 and 6 ft. lengths.

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MANUFACTURERS SINCE 1928
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"Lehigh **BLU-COLD**
fine field performance is a reflection of better engineering—" says the
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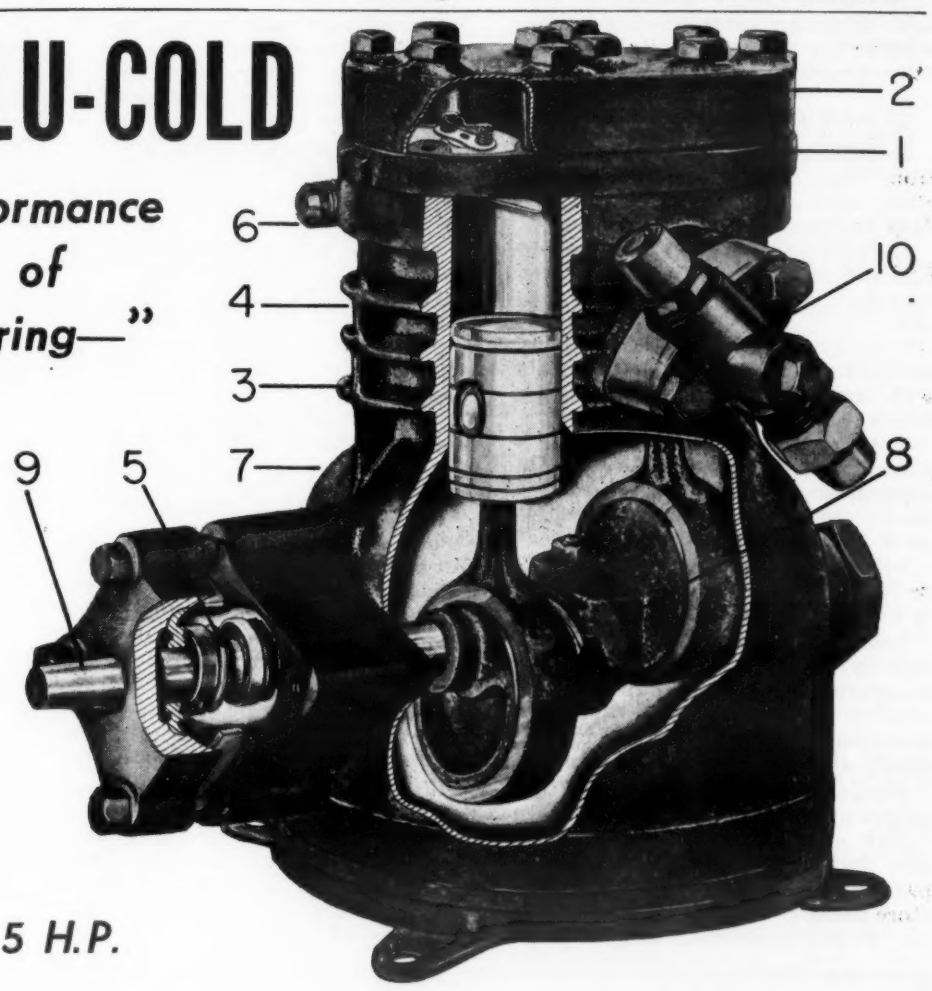

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For High, Medium, or Low Temperature Freon or Methyl Chloride.

★ PACKAGED AIR COOLED
¼ H.P. ⅓ H.P.

★ MEDIUM DUTY AIR COOLED
⅓ H.P. ½ H.P. ¾ H.P.

★ MEDIUM DUTY AIR COOLED
⅓ H.P. ½ H.P. ¾ H.P.
1 H.P. 1½ H.P. 2 H.P.

★ HEAVY DUTY WATER COOLED
¾ H.P. 1 H.P. 1½ H.P.
2 H.P. 3 H.P. 5 H.P.

See general catalog for complete specifications

Lehigh BLU-COLD COMMERCIAL REFRIGERATION

EXPORT DEPT.
39 Broadway,
New York 6,
N. Y.

10 QUALITY FEATURES
—for dependable and troublefree operation

1— Both suction and discharge valves installed on one valveplate. Valve seats are accurately ground and lapped. The use of finest Swedish steel reeds and large gas ports add to the high efficiency and quiet operation.

2— Two chambers are provided in the head, one for the suction gas returning from the low side through the suction port in the crankcase and cylinders, and an adjacent chamber for the discharge gas. This design has the added feature of a heat exchanger protecting the suction valve from accidental refrigeration slugging. All heavy-duty models have cast radiating fins on the cylinder head to provide additional cooling surface.

3— Close-grained cast iron pistons have an absolute roundness produced by the centerless grinding process. The large bearing surface reduces the wear. All Lehigh BLU-COLD heavy-duty units have piston rings.

4— The close-grained cast iron cylinders have large fins cast around the cylinder walls for heat radiation. The cylinder bores are absolutely round and honed to a mirror-like finish.

5— Carbon nose seal developed by Lehigh engineers has made seal troubles on Lehigh BLU-COLD Units practically unknown.

6— A fine mesh removable screen located just beyond the suction service valve prevents entry of foreign material from the low side of the system.

7— New, fool-proof oil check valve in oil return line, from suction porthole to crankcase prevents oil slugging when crankcase pressure is suddenly reduced.

8— The eccentric and connecting rods are selectively fitted to insure long wear and quiet operation. The connecting rods have an "H" section for maximum strength. The eccentric is securely clamped by two heat treated wedge-shaped bolts to the shaft.

9— Nickel-molybdenum alloy steel straight shaft, heat treated to Rockwell "C" 58-63 hardness and ground to a very high finish. Specially treated steel collar is shrunk on the shaft serving as thrust bearing for the shaft seal pressure. The engineering simplicity of the Lehigh BLU-COLD shaft assembly is unequalled in the industry.

10— Two way shut-off type service valves, with ⅛" gauge connection are mounted on the compressor, allowing the removal of the cylinder head without disrupting refrigerant connections. The material is drop forged brass.

Lehigh Manufacturing Co. PLANT: LANCASTER, PA.

Locker Contractor Told To Aim for 'Backroom Plants'--

(Concluded from Page 1, Column 2)

remarked. "I don't subscribe to this theory at all, but the idea has spread in some parts of the country. Maybe we ought to turn around and go back to the old grocery store business."

Another trouble causer, he said, is too-low locker rental and processing prices in many plants. He emphasized the need for operators to adjust charges to today's higher cost of operation and equipment.

NO SATURATION YET

The industry has not reached the saturation point by any means, Farquhar declared. He said there is still a big market for locker plants if current problems can be solved.

Possible solutions to these problems were outlined by John L. Hoppe, chairman of the finance committee. This committee, which also includes Foerstner and Roger Sprague, was appointed "to find ways and means of breaking the present financial deadlock which is hampering new locker plant construction."

Hoppe said investigation showed a need for 24,500 locker plants in rural areas and 4,000 urban plants, or a total of 28,500. Since there are now about 10,000 plants, this indicates a need for an additional 18,500.

As for the kind of plant needed, Hoppe noted the trend to smaller ones and emphasized the logic of selling food store owners on putting in basement and backroom plants. Proposing that the wrong type of prospect is being approached, he pointed out that the food store operator has the space for lockers, the time, skill, and incentive to run the plant, many of the utilities needed, and—being an established businessman in the community—would have little trouble getting financed.

REASONS FOR SLUMP

In addition to soliciting business from the wrong prospects, these other reasons were listed for the drop in construction:

1. There are too many contractors who are unable to sell, who are too used to having the business come to them.

2. Of those who can sell, too many believe they must sell $100,000 plants with dressy exteriors, tiled cutting rooms, etc.

3. Many plants are too completely planned. Every plant doesn't need slaughtering facilities; plans can be drawn to include these facilities later for those that do.

4. Too many plants are planned to be built from the ground up instead of finding a vacant building or space.

Two things, Hoppe said, are at the root of the financing problem: high structural costs, which can often be reduced by using a vacant building or trimming the size of the original plant, and low locker rentals.

Discussing the institute's campaign to get locker operators to raise both rental and processing charges, he said FFLI had just mailed material promoting such action to every food store plant in the country. The mailing, it was explained, included a reprint of a letter from the National Frozen Food Locker Association to locker operators and accompanying material for impressing upon locker patrons the necessity of adjusting rental and processing prices.

He then presented portions of an interim report on what the finance committee has turned up regarding financing through visits to banks and lending institutions. This committee's report covered the results of interviews with officials of the Reconstruction Finance Corp., The Bank for Cooperatives, The Bank of America, and others.

WHAT BANKS WILL DO

The report said an official of the St. Louis Bank for Cooperatives told the committee the bank would finance locker plants only for genuine groups of farmer co-ops. The Bank for Cooperatives will lend 60%—more or less—of the total cost of the plant (including land) at 4% interest on the unpaid balance.

RFC has financed many locker plants and is ready to finance more through a guarantee of 75% of any loan made by any bank affiliated with it, according to the report. The interest rate on the 75% cannot exceed 4% simple interest, while the interest on the 25% handled directly by the bank may not exceed 6%, the report said.

It was pointed out that when the local bank declines to make a loan and will indicate this to the nearest RFC office, RFC will handle the loan directly with the purchaser if satisfactory terms can be agreed upon.

'RED TAPE' LIMITED

(It had been pointed out earlier that RFC will not handle plant financing unless all local credit sources have been approached unsuccessfully. Members were told that the chances of getting financed through RFC are good if the plant is a sound proposition and that there is not too much "red tape" involved.)

Reporting on conversations with The Bank of America and other similar large banks, the committee said that when these institutions are in possession of all the facts, they seems to be favorably disposed to financing new locker plants. The Bank of America, the report stated, seemed interested in financing plants in California.

OLD FORMULA OBSOLETE

Formerly, the report noted, the prospective locker operator was obliged to pay one-third down and the balance within 36 months out of plant earnings. Lending institutions asked that locker rentals be used to pay off the unpaid balance and required that the unpaid balance be no greater than the income from rentals for three years.

But the average plant being built today cannot be financed on this formula because structural costs have risen while rentals have remained static (although increasing considerably recently), the report said. So this plan was suggested:

The cost of the land, building, and insulation should be placed on a long-time loan basis and the rest of the plant (including lockers, utilities, and equipment) on a three-year chattel loan basis. This would permit financing of a plant on the following basis, the committee said:

"1. The man entering the business would be required to pay one third of the total cost of the plant out of his own funds (advanced rentals not to be used for this purpose). 2. The balance due would be split into two notes, one covering the real estate part of the loan on say a six or seven-year basis, the other covering the rest of the investment to be paid off on a three-year or four-year basis.

"As a further guarantee of good business, we think you could require that locker rentals for the first year be placed in escrow to guarantee payment of the loan for the first year."

STEPS FOR CONTRACTORS

While noting that no answer to the financing problem has been found, the committee said it seems that more plants would be financed if the following steps were taken by locker contractors:

Limit solicitations to those who can put up one third of the cost of a finished plant exclusive of five-year advance locker rentals (local food store and retail meat operators and persons established in allied businesses serving farmers are the best prospects for the future); get a few CPA-audited statements of profitable plants in the area; then approach the bank or lending institution, suggesting the above financing plan.

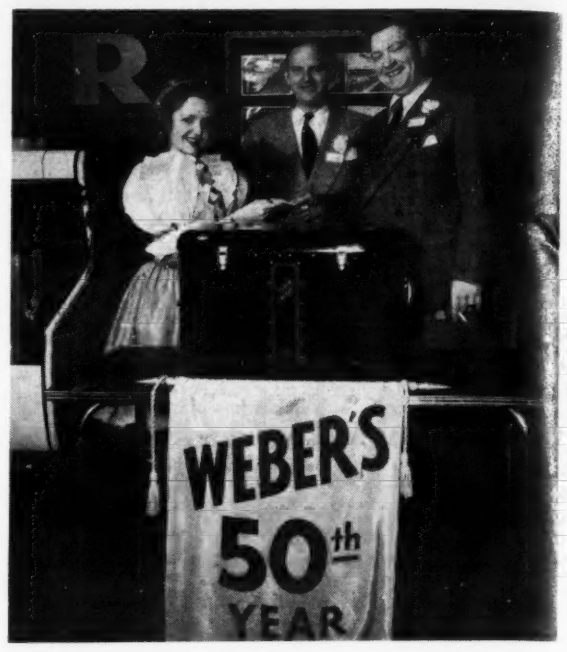
"Thus, in a typical plant of 756 lockers just completed," the report continued, "the cost of the land and building including wiring, plumbing, and plastering ran $20,000; the cost of the locker rooms including chill, aging, curing, cured meats, lockers, and refrigerating ran $34,000.

"Total cost was $54,000. One-third down payment was $18,000, leaving a balance of $36,000. The $20,000 building investment on an eight-year loan basis . . . called for repayment of $1,666.67 annually, plus interest of 5% (readily granted the established businessmen and to men who can make one-third down payment). . . ."

During subsequent discussion from the floor, comments indicated that only a very few of the contractors present had experienced any special difficulty with financing. Nearly all said that loans are usually granted if the plant is soundly conceived and if this soundness is demonstrated to lending institutions.

Executive Director Farquhar observed that contractors in the midwest apparently do not have the financing problem of those in other areas. He added that "those that are having the most trouble don't seem to be here."

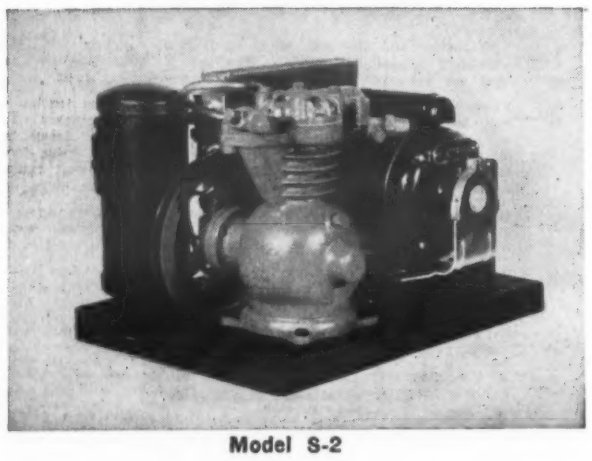
Weber Award Brings A Big Smile



Reason for the big smile on the face of E. J. Connelly (right), of Southern Packing Co., Baltimore, is that he is being awarded the Porta-Freeze case (on table) donated by Weber Showcase & Fixture Co., Inc., during the recent National Frozen Food Industry Exposition in Chicago. Doing the awarding in the Weber booth is "Colleen" Doris Harris, of Chicago, appropriately attired in a St. Patrick's Day costume, while John D. Haidinger, Weber sales promotion manager, looks on.

MULTI-COLD

Condensing Units



Model S-2

A single cylinder ¼ built to the same dimensions as our "Frigid Midget" ⅛ H.P.

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L SERIES ZEROPAK, above, a heavy-duty suspended unit for ice cream hardening rooms, frozen food storage warehouses, and modern locker plants to balance condensing units up to 15 H.P.

X SERIES ZEROPAK, right, eliminates need for sharp freeze room, makes up to 10% more locker space available.

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